

**Facebook as an Instructional  
Tool in Fostering Academic  
Achievement, Social  
Interaction Skills and Attitude  
towards Use of Facebook**



**Facebook as an Instructional Tool in Fostering Academic Achievement, Social Interaction Skills and Attitude towards Use of Facebook**

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in Fostering Academic  
Achievement, Social Interaction  
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**Bridge Center  
2015**



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## Abbreviations

SNS	Social Networking Site
VLC	Virtual Learning Commons
LME	Learning Management System
VLE	Virtual Learning Environment
RIA	Rich Internet Application
WOA	Web Oriented Architecture
LMS	Learning Management System
FB	Facebook
VLC	Virtual Learning Commons
MLV	Managed Learning Environment
PAL	Peer Assisted Learning
SITE	Satellite Instructional Television Experiment
Society	for Information Technology and Teacher Education
PESTD	Physical Education and Sports Teaching Department
SU	Sakarya University
ICT	Information and Communication Technology
BTW	By The Way
ASAP	As Soon As Possible
TM	Tomorrow
IT	Information Technology
LLL	Life Long Learning
CSCL	Computer Supported Collaborative Learning
MMLE	Multimedia Learning Environment
FOLE	Facebook as Online Learning Environment
METU	Middle-East Technical University
CUHK	Chinese University of Hong Kong
SCS	School of Continuing and Professional Studies
PLE	Personal Learning Environment
RDF	Resource Description Framework
PNP	Political Narrative Perspectives
ICPN	Internal Citizen Political Narrative
ECPN	External Citizen Political Narrative



ISPN	Internal State Political Narrative
ICPN	Internal Citizen Political Narrative

## PREFACE

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Facebook is currently the most popular social networking service in the world. With such tremendous influence on community networks, Facebook has been attracting considerable attention both from the media and academia. Social networking is a tool being explored by many institutions as a means of connecting to and communicating with students. Researcher has felt in the present mega information age in India all young generation are very much acquainted with smart phone operation, mobile phones, internet connected computer gadgets in the college and educational environment. At this time number of research works have been taking place in the western countries like USA, European countries using various internet based social media sites as instructional method formally and informally naming My space, Facebook, twitter etc. utilized at different levels right from nursery to till higher educational institutions by the teachers whereas most negligible number of studies conducted on social media sites. The administrative bodies like UGC brought norms encouraging research and innovative works at university and college level to incorporate various instructional practices and methodology. Thus, a lead to individual growth and development of teacher and professional efficiency is also going to be heightening. The social media site mainly Facebook is very popular among Indian students community motivates the students to share their photos, videos and post the text, notes etc. Another vital feature of Facebook is links of educational and social sites which accessed very easily which are available using web 2.0 technologies. These content related interactive materials which are available on various links posted on Facebook wall could be used through classroom instruction. Thus, researcher made an effort of Facebook method of teaching formally with videos, power point presentations, tutorials and notes, scanned materials on Growth and Development of individual which are posted on it as a unique and innovative technique. This study explored Facebook as an Instructional Tool in Fostering Academic Achievement, Social Interaction Skills and Attitude towards Use of Facebook. The purpose of this study is to describe how social media networks impact student-teachers when utilized as an instructional tool. The problem this study seeks to address is exploring the roles that social media play in the lives of student-teachers and the experiences they encounter by utilizing these networks academically and socially. The theoretical framework driving this study is motivational theory. Participants in this study completed experimentation and interviews and participated in a series of classroom observations.

Findings revealed that Facebook method helped in increasing achievement in Educational Psychology subject than the traditional method of teaching. It helped student-teachers to enhance their various elements of social interaction skills and the number of elements of

attitude towards use of Facebook. The study clearly shows that Facebook is an effective teaching strategy which is not only helps in academic gains but also in developing the aspects of the learner, which at present, is the need of the hour. Implementing Facebook method and assessing needs a lot of patience and time and is not an easy task. Only with the joint efforts of school authorities, teachers, students and parents, can these goals of Facebook method be achieved. The present study is a step made in this regard. The findings of this study can help teachers, parents, students and others involved in the educational field to cope with the present problems and issues being faced while implementing Facebook formally and informally, and thus exploit the benefits of Facebook method to maximum.

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Dr. G. R. Angadi

### 1.1 Introduction

Educational institutions in the information technologically driven twenty first century must learn how to integrate social software tools and apply sound pedagogical strategies in order to add value to existing practices and to enhance the learning process. ICT supplements and enhances learning and student engagement through access to global learning communities and rich resources, and this requires educators to be conversant with the technology, able to lead by example and capable of creating authentic contexts and environments for learning. Educators in today's media rich society must be ready to grapple with the significant pedagogic, cultural, and social changes associated with technological innovation.

The development and uptake of digital tools and social software rooted in information highway is bringing about massive societal and economic change. Yet, technology's impact on education, teaching, and learning has been rather limited. While expectations have run high about web-based instruction, personal computers, computer-based instruction, social media, smart phones, tabs and the raft of "Web 2.0" tools, the impact on teaching and learning is not well documented. Though the digital technological tools have been brought revolutionary changes and are incorporated in some educational settings in Western countries where as Indian educational institutions are being lagged in implementations of Web 2.0 tools Facebook, Twitter, Blogs etc. in their educational processes mainly their applications in teaching-learning processes.

Today, in a globalized, digital world, leadership challenges in the adoption and integration of emerging social software tools to supports for learning abound. Today's students who have grown up in technology saturated environments have never known a world without the Internet, mobile phones, video on demand, and personal computers. Teachers and educators must therefore know their students, and cater for their diverse needs.

There remain many exemplars of outmoded, traditional curricula and didactic instruction that merely replicate face-to-face teaching rather than innovations that make best use of interactive tools and technologies (Schrum & Leven, 2009). The research will focus on leadership challenges that teacher-educators need to be fully aware of in the adoption of emerging social software tools, and the need for teacher-educators to embrace innovative pedagogies in order to

capitalize on Web 2.0 applications to support teaching and assessment in meaningful and authentic ways. The adoption of social software tools need to be integrated into sound pedagogical strategies in order to add value to existing practices and to enhance the learning process. The study supports the notion that ICT supplements and enhances learning and student engagement through access to global learning communities and rich resources, thereby creating opportunities for dialogue with others, for broadening understanding and participation leading to improved social and learning outcomes. The realization of these benefits can only come through institutional leadership that is focused on adoption of appropriate pedagogies, learner centered curricula and the design of effective learning environments and learning activities.

Worldwide, higher education institutions today are confronted by considerable change driven by a myriad of external factors. The current learning landscape is characterized by constant connectivity, networked spaces, web-based tools and virtual learning environments. Mobile devices and social media abound, and the dramatic shift in learner characteristics and demands is evidenced by the emergence of “millennial students” who are digitally literate, always on, communicative, and experimental and community oriented. The terms “learner voice” and “learner experience” are central to today’s technology supported learning environments, and a number of studies have emphasized how ICT tools can facilitate learner engagement and participation. Today’s students demand interactivity and thus there is a pressing need to meet their needs and to rethink approaches to teaching and learning in order to replace outmoded didactic pedagogies, which place emphasis on the delivery of content from a textbook or website rather than being learner-centric and to allowing for self-paced flexible learning. Clearly, many popular learning management systems (LMS’s) and virtual learning environments (VLE’s) used by educational institutions to support e-learning perceive the student as “information consumer” thereby reinforcing instructor and content centered approaches to teaching, learning, and cognition.

Many commonly used learning management systems simply feed information or content to students and do not include social engagement, peer learning or creative inquiry by students. In the Web 2.0 era, such approaches no longer meet student needs. Tim Berners-Lee, the inventor of the World Wide Web, foreshadowed a more open, social raft of tools that are not simply about learners downloading and consuming information when he stated, “I have always imagined the information space as something to which everyone has immediate and intuitive access, and not just to browse, but to create”. These words foreshadowed the Web 2.0 era, with its raft of social tools (Flickr, Facebook, Twitter, and MySpace) which allow users expanded capacities for creative, collaborative and communicative responses, often leading to idea generation and knowledge creation. The rise of learner generated content is captured by Wheeler, Yeoman and

Wheeler who state "The social network provides opportunities for the individual learner to create sound and viable knowledge syntheses from fractured and inchoate information".

As far as creative thinking and action are important in creative society, pre-service teacher training is one of the areas where information and communication technologies should be used intensively. In order to train individuals who are equipped with skills regarding lifelong learning, there is an increasing need for student-educators who serve as efficient models in using information and communication technologies. Moreover, the need for learner-centered approaches which are integrated with sound technological infrastructures is increasing constantly.

In the twenty-first century, Internet technologies serve as platforms where individuals can access knowledge and interact with other individuals wherever and whenever they want. Today's students who have grown up in technology saturated environments have never known a world without the Internet, mobile phones, video on demand, and personal computers. If such a powerful technology can be applied with appropriate pedagogical approaches in education, it can be used as an effective tool to trigger student accountability and social interaction. Internet technologies make use of several synchronous and asynchronous tools to sustain social interaction in online learning. Potential of online or virtual communities to facilitate interaction is evaluated in different circumstances. Student-teachers must benefit from online environment for many instances of professional development. However, developing an online environment is not about using technology but rather about designing, building and supporting a structure and a process that are purposeful and fluid in nature and in teachers.

### **1.1 Background of the Study**

Most of the college students are aware of the recent uprising of the mega-internet platforms now known as social media in India and abroad. Their increase in popularity has brought a new level of communication and interaction to all groups and ages, especially on college and university campuses. As regular students, many know that social media has become just as effective as e-mail, text messaging, and phone calls because of the instant communication capability. Instruction in using Facebook should be an integral part of teacher-education programs, particularly with so many different types of social networks emerging. As Voithofer notes, instructing teacher education students on social networks encourages them to consider.

1. The technical and pedagogical characteristics of educational technology,
2. The social aspects of educational technology, and
3. How to think about emerging technologies in relation to teaching.

It is important for teacher-educators to introduce students to social networks. As an optional assignment, teacher can have students create their own Facebook account and “become friends” with at least one other member of class. Then, have students post appropriate, class-related images, videos, content, messages about course assignments and events, and course applications, on Facebook - persuade students to experiment with different features. Teachers who engage with a technological medium are more likely to value that technological tool in their teaching. Teacher educators should have students implement Facebook in a currently taught course, focusing on integrating course content and objectives. When implementing Facebook, pre-service teachers must consider a pedagogical rationale for using Facebook as well as suggested course applications. To further identify real and potential issues when using Facebook, teacher-educators can assign articles about the educational uses of Facebook. Then, drawing from their personal experience with Facebook and the readings, pre-service students can reflect about Facebook as an educational tool in the classroom or a Facebook wall.

In today’s information global village, the advancements in other countries certainly brought so many changes on Indian educational system. As only, few research studies have undertaken in western on Facebook and other social sites as a teaching device and most of the Indian college students involved in the social interactions through Facebook access have motivated the researcher to select this study to instruct formally and informally. The current study investigates pre-service teachers’ views on social media, in particular Facebook use for supporting instruction and its operation, achievement in learning, attitude towards usage of Facebook and sustaining social interaction skills among student-teachers to create a meaningful way to future professional development opportunities.

The current study is investigated pre-service teachers’ views on Facebook social media as an agent of instruction, in particular applications and features of eBook social media which are being supported teaching-learning abilities and proficiency in operational abilities of learners, secondly achievement of student-teachers in learning of the content being taught via Facebook media formally and informally, later how their attitude is being developed towards usage and operation of Facebook will be assessed and finally sustaining social interaction skills developed among student-teacher and student-student as well to create a meaningful way, foreshadow their professional developmental and skilled opportunities. Facebook created specifically for an educational student provides a unique opportunity for educators to “facilitate a strong sense of community among students” and encourage “personal interactions that can lead to the creation of new knowledge and collective intelligence.” Learning is also viewed as social activity, where

learners construct their understanding not just through interaction with the material, but also through collaboratively constructing new knowledge with their peers.

Education as a primary means of instruction is expanding significantly at the college and university level. Simultaneously, the growth of social networking sites (SNS) including Facebook, LinkedIn, and MySpace is also rising among today's college students. An increasing number of higher education instructors are beginning to combine education delivery with SNSs. However, there is currently little research detailing the educational benefits associated with the use of SNSs. One of the research survey reiterated; Non-commercial, education-based SNSs, such as Ning in Education, have been recently shown to build communities of practice and facilitate social presence for students enrolled in education courses. In order to evaluate the largely unexplored educational benefits of SNSs, it surveyed graduate students enrolled in distance education courses using Ning in Education, an education-based SNS, based on their attitudes toward SNSs as productive online tools for teaching and learning. The results of study suggest that education-based SNSs can be used most effectively in distance education courses as a technological tool for improved online communications among students in higher distance education courses. This result strongly motivated the researcher to integrate facebook as instructional method in B.Ed. teacher trainee course which is widely addicted by pupil group at college level in India.

## **1.2 Significance of the Study**

The following aspects had encouraged the investigator to undertake this study:

1. To propose the idea of using the social network site, Facebook, for pre-service teacher education as a method of instruction formally and informally.
2. It explores the advantages of Facebook and illustrates the different levels of course integration at an instructor's disposal.
3. It provides specific instructions on how to use Facebook and a discussion of "best practice" policies that can be ethically implemented within the classroom.
4. Specific attention is given to suggestions for creating a professional Facebook presence in which future teacher-educators can emulate.
5. Benefits of Facebook capabilities can benefit both the teacher-educators and the student-teachers by tapping into a greater number of learning styles.
6. Providing an alternative to the traditional lecture format, creating an online classroom community, and increasing teacher-content, teacher-student and student-student interaction.



7. Efforts to expand pedagogical portfolio, promote active learning through a learning community.
8. To test the effectiveness of on-line learning communities through Facebook social media.
9. This alternative teaching tool to determine Facebook learning communities to complement the traditional classroom experience is worth the cost of retooling and restructuring.
10. Teacher preparation can be enhanced by creating opportunities for teachers in training to see, experience, and effectively model lessons learned on Facebook in their future classrooms.
11. Using Facebook, educators are able to reach students through new communication media and provide students with exposure and experience to valuable tools.

### **1.3 Social Network Sites and Web 2.0 Technologies**

#### **1.3.1 Social Network Sites (SNSs)**

There are many social networking sites being used in higher education in western countries and elsewhere. According to many survey on use of social networking it was established that some of the most popular social networking sites is being used in higher education include, Facebook, MySpace, Twitter, LinkedIn, Fraudster, Live Journal and MySpace. "The most famous in the world of social networks are Facebook (Facebook.com) and Twitter (Twitter.com) and MySpace (myspace.com) and others." Similar sentiments are echoed the two most popular social networking sites are Facebook and MySpace. Researchers like and claim that Facebook and YouTube are the two most commonly used social media technologies among all students. In addition to the social networking sites mentioned so far, adds Bebo as an example of a Social Networking Site. On the contrary, NING as a social networking site which is mainly used in academia.

However, Boyd and Ellison's overview of the field in the Journal of Computer-Mediated Communication comments on the particular communication opportunities provided by social network sites (SNSs): A form of real-time direct text-based communication between two or more people using personal computers or other devices. "We define social network sites as web-based services that allow individuals to:

1. construct a public or semi-public profile within a bounded system,
2. articulate a list of other users with whom they share a connection, and
3. view and traverse their list of connections and those made by others within the system.

The nature and nomenclature of these connections may vary from site to site... What makes social network sites unique is not that they allow individuals to meet strangers, but rather that they enable users to articulate and make visible their social networks... While SNSs have implemented a wide variety of technical features, their backbone consists of visible profiles that display an articulated list of friends who are also users of the system... The public display of connections is a crucial component of SNSs. Beyond profiles, friends... SNSs vary greatly in their features and user base... Some have photo sharing or video-sharing capabilities; others have built-in blogging and instant messaging technology." Social networking websites allow individuals to network with others whether the purpose is to create new professional connections or personal relationships. These types of websites include but are not limited to professional sites such as LinkedIn, hybrid sites which can be either professional or personal such as My space or Facebook, and purely social websites that include eHarmony and Match.com.

### **1.3.2 Web 2.0 Technologies**

Web 2.0 describes web sites that use technology beyond the static pages of earlier web sites. The term was coined in 1999 by Darcy Di Nucci and was popularized by Tim O'Reilly at the O'Reilly Media Web 2.0 conference in late 2004. Although Web 2.0 suggests a new version of the World Wide Web, it does not refer to an update to any technical specification, but rather to cumulative changes in the way web pages are made and used.

A Web 2.0 site may allow users to interact and collaborate with each other in a social media dialogue as creators of user-generated content in a virtual community, in contrast to websites where people are limited to the passive viewing of content. Examples of Web 2.0 include social networking sites, blogs, wikis, folksonomies, video sharing sites, hosted services, web applications, and mashups.

Whether Web 2.0 is substantively different from prior web technologies has been challenged by World Wide Web inventor Sir Tim Berners-Lee, who describes the term as jargon. His original vision of the Web was "a collaborative medium, a place where we all meet and read and write".

Web 2.0 offers all users the same freedom to contribute. While this opens the possibility for serious debate and collaboration, it also increases the incidence of "spamming" and "trolling" by unscrupulous or misanthropic users. The impossibility of excluding group members who don't contribute to the provision of goods from sharing profits gives rise to the possibility that serious members will prefer to withhold their contribution of effort and ride on the contribution of others. This requires what is sometimes called radical trust by the management of the website. According

to Best, the characteristics of Web 2.0 are rich user experience, user participation, dynamic content, metadata, web standards and scalability. Further characteristics, such as openness, freedom and collective intelligence by way of user participation, can also be viewed as essential attributes of Web 2.0.

Web 2.0 technologies provide a level user interaction that was not available before. Websites have become much more dynamic and interconnected, producing "online communities" and making it even easier to share information on the Web. Because most Web 2.0 features are offered as free services, sites like Wikipedia and Facebook have grown at amazingly fast rates. As the sites continue to grow, more features are added, building off the technologies in place. So, while Web 2.0 may be a static label given to the new era of the Web, the actual technology continues to evolve and change.

#### **1.4 The key features of Web 2.0 Technologies**

Some of the key features of Web 2.0 technologies are given below:

1. Folksonomy; free classification of information
2. A rich user experience - pages are dynamic and respond to user input by design.
3. A user as a contributor - information flows two ways between site owner and site user by means of evaluation, review and commenting.
4. Long tail - profit is realized through monthly service subscriptions more than one-time purchases of goods over the network.
5. User participation - site users add content for others to see.
6. Basic trust - contributions are available for the world to use, reuse, or re-purpose.
7. Dispersion - digital resources and services are sought more than physical goods.
8. Mass participation

#### **1.5 Concepts of Web 2.0 Technologies**

Web 2.0 can be described in three parts:

1. **Rich Internet application (RIA)** - defines the experience brought from desktop to browser whether it is from a graphical point of view or usability point of view. Some buzzwords related to RIA are Ajax and Flash.
2. **Web-oriented architecture (WOA)** - is a key piece in Web 2.0, which defines how Web 2.0 applications expose their functionality so that other applications can leverage and integrate the functionality providing a set of much richer applications. Examples are feeds, RSS, Web Services, mash-ups.

3. **Social Web** - defines how Web 2.0 tends to interact much more with the end user and make the end-user an integral part.

As such, Web 2.0 draws together the capabilities of client and server-side software, content syndication and the use of network protocols. Standards-oriented web browsers may use plug-ins and software extensions to handle the content and the user interactions. Web 2.0 sites provide users with information storage, creation, and dissemination capabilities that were not possible in the environment now known as "Web 1.0".

Web 2.0 websites include the following features and techniques, referred to as the acronym SLATES by Andrew McAfee:

1. **Search** - Finding information through keyword search.
2. **Links** - Connects information together into a meaningful information ecosystem using the model of the Web, and provides low-barrier social tools.
3. **Authoring** - The ability to create and update content leads to the collaborative work of many rather than just a few web authors. In wikis, users may extend, undo and redo each other's work. In blogs, posts and the comments of individuals build up over time.
4. **Tags** - Categorization of content by users adding "tags" - short, usually one-word descriptions - to facilitate searching, without dependence on pre-made categories. Collections of tags created by many users within a single system may be referred to as "folksonomies" (i.e., folk taxonomies).
5. **Extensions** - Software that makes the Web an application platform as well as a document server. These include software like Adobe Reader, Adobe Flash player, Microsoft Silverlight, ActiveX, Oracle Java, QuickTime, Windows Media, etc.
6. **Signals** - The use of syndication technology such as RSS to notify users of content changes. While SLATES forms the basic framework of Enterprise 2.0, it does not contradict all of the higher level Web 2.0 design patterns and business models. In this way, a new Web 2.0 report from O'Reilly is quite effective and diligent in interweaving the story of Web 2.0 with the specific aspects of Enterprise 2.0. It includes discussions of self-service IT, the long tail of enterprise IT demand, and many other consequences of the Web 2.0 era in the enterprise. The report also makes many sensible recommendations around starting small with pilot projects and measuring results, among a fairly long list.
7. **Usage** - A third important part of Web 2.0 is the Social web; this is a fundamental shift in the way people communicate. The social web consists of a number of online tools and platforms where people share their perspectives, opinions, thoughts and experiences.

Web 2.0 applications tend to interact much more with the end user. As such, the end user is not only a user of the application but also a participant by:

- Podcasting
- Blogging
- Tagging
- Curating with RSS
- Social bookmarking
- Social networking
- Web content voting

#### **1.6 Examples of Web 2.0 & Social Networking Sites**

##### **Facebook**

A social networking service where users create personal profiles, add other users as friends and exchange messages, including automatic notifications when they update their own profile. Additionally, users may join common-interest user groups, organized by common characteristics (e.g. workplace).

##### **Twitter**

A micro blogging service enabling its users to send and read publicly visible messages called tweets. Tweets are text-based posts of up to 140 characters displayed on the user's profile page. Users may subscribe to other users' tweets.

##### **LinkedIn**

A business-related social networking site mainly used for professional networking. Users maintain a list of contact details of people with whom they have some level of relationship, called connections. This list of connections can then be used to build up a contact network, follow different companies and find jobs, people and business opportunities.

##### **MySpace**

IT is an online community of users' personal profiles. These typically include photographs, information about personal interests and blogs. Users send one another messages and socialize within the MySpace community.

##### **YouTube**

A video-sharing website on which users can upload, share, and view videos. A wide variety of user-generated video content is displayed, including film and TV clips as well as amateur content such as video blogging. Media corporations including the BBC also offer some of their material via the site. Most videos enable users to leave and exchange comments.

### **Wikipedia**

A collaborative web-based encyclopedia project; its 18 million articles have been written collaboratively by volunteers around the world, and almost all articles are freely editable by any visitor. A prominent web 2.0 site but not an example of social networking site per se. A blog is a type of website or part of a website usually maintained by an individual with regular entries of commentary and descriptions of events (blogging). The content of a micro blog is simply smaller.

### **1.7 Web 2.0 Technologies in Education**

There is a debate over the use of Web 2.0 technologies in mainstream education. Issues under consideration include the understanding of students' different learning modes; the conflicts between ideas entrenched in informal on-line communities and educational establishments' views on the production and authentication of 'formal' knowledge; and questions about privacy, plagiarism, shared authorship and the ownership of knowledge and information produced and/or published on line.

Web 2.0 technologies provide teachers with new ways to engage students, and even allow student participation on a global level. However, children raised exclusively in the era of new media technologies are less patient with activities such as completion of worksheets and classroom lectures. Decreased participation in a traditional classroom may be due to better feedback received online.

Will Richardson stated in *Blogs, Wikis, Podcasts and other Powerful Web tools for the Classrooms*, 3rd Edition that, "The Web has the potential to radically change what we assume about teaching and learning, and it presents us with important questions to ponder: What needs to change about our curriculum when our students have the ability to reach audiences far beyond our classroom walls?". Web 2.0 tools are needed in the classroom to prepare both students and teachers for the shift in learning that Collins and Halverson describe. According to Collins and Halverson, the self-publishing aspects as well as the speed with which their work becomes available for consumption allows teachers to give students the control they need over their learning. This control is the preparation students will need to be successful as learning expands beyond the classroom."

By allowing students to use the technology tools of Web 2.0, teachers are giving students the opportunity to share what they learn with peers. Some are concerned that these technologies could hinder the personal interaction of students: "Social networking sites have worried many educators (and parents) because they often bring with them outcomes that are not

positive: narcissism, gossip, wasted time, 'friending', hurt feelings, ruined reputations, and sometimes unsavory, even dangerous activities".

Web 2.0 calls for major shifts in the way education is provided for students. One of the biggest shifts that Will Richardson points out in his book *Blogs, Wikis, Podcasts, and Other Powerful Web Tools for Classrooms* is the fact that education should be collaboratively constructed. This means that students, in a Web 2.0 classroom, are expected to collaborate with their peers. By making the shift to a Web 2.0 classroom, teachers are creating a more open atmosphere where students are expected to stay engaged and participate in class discussions. In fact, there are many ways for educators to use Web 2.0 technologies in their classrooms.

Weblogs are not built on static chunks of content. Instead, they are comprised of reflections and conversations that in many cases are updated every day. They demand interaction." Will Richardson's observation of the essence of weblogs speaks directly to why blogs are so well suited to discussion based classrooms. As long as the students are invested in the project, weblogs give students a public space to interact with one another and the content of the class.

For example, Laura Rochette implemented the use of blogs in her American History class and noted that in addition to an overall improvement in quality, the use of the blogs as an assignment demonstrated synthesis level activity from her students. In her experience, asking students to conduct their learning in the digital world meant asking students "to write, upload images, and articulate the relationship between these images and the broader concepts of the course, [in turn] demonstrating that they can be thoughtful about the world around them." The term Web 2.0 was initially championed by bloggers and by technology journalists, culminating in the 2006 TIME magazine Person of The Year (You). That is, TIME selected the masses of users who were participating in content creation on social networks, blogs, wikis, and media sharing sites. In the cover story, Lev Grossman explains:

It's a story about community and collaboration on a scale never seen before. It's about the cosmic compendium of knowledge Wikipedia and the million-channel people network YouTube and the online metropolis MySpace. It's about the many wresting power from the few and helping one another for nothing and how that will not only change the world but also change the way the world changes.

Web 2.0 it is a term that was introduced in 2004 and it refers to the second generation of the World Wide Web. The term "2.0" comes from the software industry, where new versions of software programs are labeled with an incremental version number. Like software, the new generation of the Web includes new features and functionality that was not available in the past.

However, Web 2.0 does not refer to a specific version of the Web, but rather a series of technological improvements.

### **1.8 Social Media Tools for Learning**

Here are descriptions of ten applications representing different social media technologies that promote learning. Many of these tools and services are free or have a free trial period, which can encourage experimentation.

Each tool fulfills at least one of these criteria: encourages collaboration; enables user-generated content or input; provides a way to share; and facilitates informal or formal learning. Be sure to do additional research and comparison with similar products prior to making a selection as this is just a small sampling.

#### **Audacity**

Category: Podcasts

Although podcasts are a one-way form of communication, they enable the creation of user-generated content. Podcasts are fairly easy for anyone to make and with the free downloadable software, Audacity, it becomes an inexpensive option. Podcasts are a great medium for distributing an organization's content and expertise because they can be played on hand held devices and computers.

Users can record and edit audio with Audacity and it runs on most operating systems, including Mac OS X and Windows. Key features include recording through a microphone or mixer, digitizing recordings from tapes, audio editing, importing and exporting audio files, effects and quality adjustments. For details on how to create a podcast, see [How to Create Your Own Podcast](#) on About.com.

#### **Edublogs Campus**

Category: Blogs

Bloggng to teach others is common in the public domain, but not so within an organization Edublogs. Campus is hoping to change that. This software provides a way to centralize and manage blogs within an institution by hosting them all on one domain. Although Edublogs seems focused on academia, it's also ideal for other types of organizations due to its centralized control, privacy options, security features, custom branding and support.

In terms of promoting learning, employees could use blogs to write first-hand accounts of case studies, lessons learned, project debriefings, travel tips and cultural customs. Internal experts could blog about their areas of proficiency. Bloggng could help an organization's knowledge quotient explode and is definitely something worth exploring.



## **Elgg**

Category: Social Networking Platform

Elgg is a social networking engine and publishing platform for running your own social networking site on a public or private server. It's a free and open source application with templates and plugins for enhancements. Elgg is an aggregate of many social media technologies in one platform. Users can create and join groups, connect with friends, display a profile, blog and microblog (similar to Twitter). In terms of content, people can add pages, upload presentations, documents and multimedia files as well as tag the pages. This makes Elgg an ideal platform for learning and collaboration.

For example, a large organization with geographically dispersed offices can use Elgg on an internal server to introduce employees to each other and to share internal knowledge across offices; employees can use Elgg to create online study groups; and nonprofit organizations can build communities of common interest where members learn from each other.

## **Go To Meeting**

Category: Interactive Webinars and Live Presentations

Go to Meeting and Go to Webinar have proven themselves to be topnotch ways to collaborate, discuss and teach. This is an easy way to initiate face-to-face collaboration through audio, screen sharing and now high-definition video conferencing. Meetings are started by a host who sends out a link in an email or chat. It takes around two-minutes for a first-time user to get set-up and started.

This flexibility and ease of use could encourage impromptu learning events and meetings that can be set up in a moment's notice, increasing the informal learning opportunities within and outside an organization. Users can share voice and video, display online PowerPoint presentations, documents, share the screen and show web pages, making annotations with drawing tools along the way. The collaborative feature lets participants get in the act by sharing keyboard and mouse control. You can also save and replay a meeting so others can learn from your meeting. There are several pricing models for using Go To Meeting, including a free trial for 30 days.

## **Google Collaboration Tools**

Category: Collaborative Resources

It would be difficult to create a ten-list without mentioning some of Google's continually evolving Google Collaboration Tools for Education and Business. Google has created a compelling infrastructure for a variety of collaboration tools. Some of the tools relevant to collaborative learning include: Google Docs (word processing, spreadsheets, forms and presentations); Google

Sites (team website creation); Google Video (add comments, tags and ratings); Google Conversations (for integrating discussions) and Google Wave (combines email, Instant Messaging, Wikis and photo sharing), which has limited availability at the time of this writing. The key advantage to Google Apps is that all the software runs in a web browser, so that users with permission can view and edit the documents. The collaborative environment this creates encourages people to share knowledge and learn from each other, to engage in peer review and to generate content in a collective manner.

#### **MindMeister**

Category: Mind Maps

One way to learn and solve problems more effectively is by visualizing information. MindMeister provides a browser-based service for creating mind maps through an intuitive interface. These diagrams can be used during brainstorming sessions, as a way to explain concepts, for information organization and for creative problem solving.

Mindmeister's mind maps can be used in a collaborative environment, as well as saved and shared. When two or more users collaborate on the same map in real-time, all changes are replicated in a color-coded format so everyone can see updates instantaneously. Mindmeister comes with several pricing plans, from the basic free plan to a premium plan with enhanced security.

#### **TalkShoe**

Category: Talk Shows

Think of TalkShoe as a way to have your own radio talk show. This is a free web-based service in which anyone can create, join or listen to live interactive presentations, discussions and conversations. Talk shows can be recorded, making them available as podcasts later. Talk show hosts control the process and participants can just listen or join in by talking or via text-chat.

For informal and impromptu learning, you can browse through their list of current and scheduled shows. To create your own workplace learning, you can schedule events on TalkShoe and then publicize them. Would you like a colleague to teach a course with interactive comments from a broader community? Would your organization benefit from a question and answer session with an expert, an interview with an author or a panel discussion using expertise outside of your organization? Then a live talk show may be for you. Hosts have control, but should be prepared to manage participants, who can join from anywhere on the Internet.

#### **VoiceThread**

Category: Multimedia Presentations

VoiceThread is a tool for having discussions around media, such as a presentation, video or image. Participants watch or listen and then comment by telephone, web cam, microphone, text or by uploading a file. Users can then delete and re-record a comment, as needed. A small photo or drawing of the participant is then displayed around the media. To listen to comments, click the photos or the Play button. Although this approach to discussion does not facilitate real-time conversations, it does promote collaboration and threaded discussion. For example, someone could propose an idea or a pilot presentation and solicit feedback from colleagues. Or a staff member could create a starter learning event that gets enhanced by the knowledge distributed around the organization, added as comments.

VoiceThread features include control over which comments are shown, embedding the conversation to any web page, drawing on the presentation while creating a comment, ability to create groups, privacy options and support for most accessibility standards. VoiceThread has a professional version for businesses that provides features for secure sharing and management of threads for staff and clients.

### **Wikispaces**

Category: Wikis

A Wiki is software for creating and editing interlinked web pages. Wikispaces is one of the more popular wiki applications, with its reputation for ease of use and varied pricing models, from free to Private Label. Wikis promote collaborative learning and information sharing because anyone with rights can add content to the system. Imagine software experts adding their top tips to an organization's Wiki after a new software roll out or asking experienced project managers to write up a "lessons learned" page at the end of each project. Wikispaces features a WYSIWIG editor, widgets for enhancements to other services, ability to upload multimedia content, discussions, RSS and email notifications, revision tracking and security options.

If you're looking for a completely free and open source Wiki for a large installation, check out Media Wiki, which is the downloadable software that supports Wikipedia. And if you're willing to do some comparison shopping, see the amazing Wiki Matrix to compare a long list of Wikis.

### **Yammer**

Category: Microblogging

Who would have thought that 140 characters of text could be so powerful? Yet microblogging has become a revolutionary way of streamlining communication. Twitter, the most well-known microblogging platform, is highly public - an issue for many organizations. Yammer is a compelling solution to this problem, as it provides a secure enterprise microblogging platform. It's a simple

means for social sharing within an organization and can become a surprisingly virile form of messaging, collaborating and discussing.

At its most superficial level, Yammer can keep other employees abreast of the projects on which their colleagues are working. As participation grows and employees post their profiles with job titles, expertise and background, Yammer can develop into a social network with potential. This could transform an organization of isolated employees into a rich network of approachable contacts. As discussions grow to include questions, content links and information dissemination, content can be searched and serve as an organization's knowledge base. Yammer seems to be a simple way to engage and to open communication across an organization.

### **1.9 Facebook as a Social Media**

Facebook is a social networking website that was originally designed for college students, but is now open to anyone 13 years of age or older. Facebook users can create and customize their own profiles with photos, videos, and information about themselves. Friends can browse the profiles of other friends and write messages on their pages.

Each Facebook profile has a "wall," where friends can post comments. Since the wall is viewable by all the user's friends, wall postings are a public conversation. Therefore, it is usually best not to write personal messages on your friends' walls. Instead, you can send a person a private message, which will show up in his or her private Inbox, similar to an e-mail message. Facebook allows each user to set privacy settings, which by default are strict. For example, if you have not added a certain person as a friend, that person will not be able to view your profile. However, you can adjust the privacy settings to allow users within your network (such as your college or the area you live) to view part or all of your profile. You can also create a "limited profile," which allows you to hide certain parts of your profile from a list of users that you select. If you don't want certain friends to be able to view your full profile, you can add them to your "limited profile" list.

Another feature of Facebook, which makes it different from MySpace, is the ability to add applications to your profile. Facebook applications are small programs developed specifically for Facebook profiles. Some examples include SuperPoke (which extends Facebook's "poke" function) and FunWall (which builds on the basic "wall" feature). Other applications are informational, such as news feeds and weather forecasts. There are also hundreds of video game applications that allow users to play small video games, such as Jetman or Tetris within their profiles. Since most game applications save high scores, friends can compete against each other or against millions of other Facebook users.

Facebook provides an easy way for friends to keep in touch and for individuals to have a presence on the Web without needing to build a website. Since Facebook makes it easy to upload pictures and videos, nearly anyone can publish a multimedia profile. Of course, if you are a Facebook member or decide to sign up one day, remember to use discretion in what you publish or what you post on other user's pages. After all, your information is only as public as you choose to make it!

#### **1.10 Facebook as a Method of Instructional Tool**

After going through the various literatures and information given below about incorporation of Facebook account profile, researcher opened the Facebook profile account in the name of "Hegadi Atma Vedike" for instructing the experimental group which is constituted with student-teachers of KSS Vijayanagar college of education, Hubli affiliated to Karnatak University, Dharwad and parallel he used shared his individual Facebook profile "Pampapati Hegadi" with "Hegadi Atma Vedike" whenever necessity arises, later researcher developed skillfully the operational features of Facebook among the student-teacher. In the introductory classes researcher demonstrated and operated the opening profiles of Facebook account and asked the student-teachers to create a limited profile with controlled settings, and become friend to new teacher's profile. Later student-teachers of his class created their profiles, joined list and group of B.Ed. class in the name of "Hegadi Atma Vedike". Then researcher posted the various materials like videos, ppts, texts, photographs, etc. on Facebook wall about topic "Child Development and Learning" of Educational Psychology (Education-3) subject prescribed by Karnatak University, Dharwad.

It is understood from the following experiences that Facebook can be used as instructional tool before incorporating the Facebook.

Can the widely popular social network be used constructively in the classroom? This student's story says it can. In August of 2011, student Kristen Nicole Cardon submitted a comment in response to the post five reasons why educators need to embrace internet technologies in which she explained how she used Facebook in a course she took. It really appreciated her well stated discussion of how Facebook was used in the course and how the approach succeeded. "In my British Literary History course last winter semester, my professor created a class Facebook group which we all joined. We'd finish our reading for class and then get online and write a paragraph about what we'd read, focusing our comments on the specific course aims that my professor had created for the class. We would then go to class where my professor would note the ways in which we'd covered the material well and he'd teach anything we missed as well as anything else he wanted us to know.

This way of conducting class was effective because:

1. We were socially motivated to complete the reading and contribute to the online discussion.
2. We didn't spend class time going over that which we already understood.
3. We were able to benefit from insights from peers who generally don't participate in class discussion.
4. We all learned to focus the vast amount of reading required for such a course to the specific course aims of our professor.
5. Through contributions from our classmates, we understood how each distinct text related to the others and to the class focus, and so on.

We shouldn't discount Facebook when it has proven to be a worthwhile classroom tool. I should also note that a class Facebook group doesn't require the professor or students to "friend" each other to participate."

So Facebook was used to facilitate a discussion group, which can certainly be done with an LMS like Blackboard or Moodle or with various other tools, but the nice thing about Facebook is that many students are already familiar and comfortable with it - it's a "known entity" to them. Another positive thing, which addressed a concern of mine in this environment, was that there was a 'wall' between this academic use and the personal uses students have for the tool - by being in the group you didn't have to friend anyone or expose your personal information.

There are so many ways in which today's Internet based tools can play a creative, constructive role in the educational process ... even those tools that we shy away from because they seem more like 'pop culture' throw-aways than academic tools.

Here are a few other examples of Facebook playing a productive role in the classroom:

1. **University of South Florida teacher uses Facebook in class:** About USF graduate student Alessandro Cesarano, who teaches a Beginning Spanish class, and uses Facebook for homework assignments and class discussions in lieu of Blackboard. Cesarano says, "I like the Facebook page better than Blackboard because students have more access to authentic cultural material, and I don't have to waste class time teaching them how to use a new program because many of them already use Facebook."
2. **Texas Kindergarten Teacher communicating with Parents via Facebook:** Kindergarten teacher Matt Gomez wrote a couple posts on his blog, [mattgomez.posterous.com](http://mattgomez.posterous.com), about his use of Facebook as a tool to communicate with parents. In this post, he explained that he had, "been toying with the idea of the page for several months. The main reason is Facebook has 500 million+ users. This is a tool that most parents know how to use and use on a consistent basis. Why struggle to make parents visit your

website or blog when you can meet them in a place they already visit online?" In this post, he provides some observations about how it worked out.

3. **Classroom 2.0 Discussion Forum:** This discussion thread has a number of comments from educators who have used Facebook in the educational setting, such as these comments from...

Jason Graham: "I've been using Facebook with grade 1... yes grade 1. Most of the parents are on FB so it's a convenient way to communicate with them, and they can send private messages as well. Most of the parents are busy on the go people who use their Blackberries and FB, Twitter etc. to communicate. It's convenient for all. Plus it provides a digital record."

Anne De Manser: "I use Facebook with my students in several ways. I find it is a great way to provide positive role modeling in an online environment by making positive comments on their Facebook walls and by providing them a window into the way my 'public' face looks online. It's just another way of communicating and building relationships with our school community."

#### **1.11 Setting up a Facebook Group for Class**

If anybody wishes to learn more about how best to configure things in Facebook for use in a course based application, here are a few resources that provide guidance.

First, there is this document from Elon University, which offers details on how to set up profiles and course content, following this basic approach:

1. Create a teacher profile separate from your personal profile
2. Ask students to create a limited profile with controlled settings, and to friend your new teacher profile
3. Create Lists & Groups for your classes
4. The document then goes on to discuss how to use various Facebook tools as part of the instructional process.

Anybody also want to watch these YouTube videos from "JayDfsu", which illustrate "The Basics of a Facebook Page for Educators", "Privacy on Facebook for Educators", "Setting Up a Facebook Group for Your Class", and more.

Other ideas for using Facebook in the classroom: for those interested in giving Facebook a shot as part of their instructional process, here are a few more sources of ideas about thing you might want to try:

- 100 Ways You Should Be Using Facebook In Your Classroom
- 15 Facebook Apps Perfect for Online Education
- How to Use Facebook Questions in the Classroom

### **Five Fun Ways to Use Facebook in Your Lesson Plans and Teaching**

The most popular site on the Internet can be leveraged in the classroom in engaging and useful ways. Facebook has become such a ubiquitous part of our lives that it has evolved to be much more than a way to find out what happened to that guy you had Bio with back in high school or to share pictures of your baby. Many people use Facebook to communicate and network with both friends and professional colleagues, and to learn about products, services, organizations and events.

Facebook is also a handy tool for teachers. Since so many students in High School and college are now Facebook natives, it makes sense to use the social network to connect with students and offer them a new way to learn and access learning content. If you are a teacher with a personal Facebook account, it is advised that you create a professional Facebook account (you'll need a separate email address in order to do this), to keep your teaching related uses of tool entirely separate from your personal account. Students should consider doing the same (they could use their school email for the new account and associate their personal account with a personal email address).

Here are a few ideas for incorporating Facebook into lesson plans and course work:

**Create Fictitious Profiles or Fan Pages.** Who among us did not have to do a biography report on a famous author or historical figure? Think about how much more fun that project would have been if you could have created a Facebook fan page or profile for that person instead.

Teachers of all subjects can use this idea to help their students learn more about significant figures in the field. Students can create complete pages for their figures, including biographical information, "Likes", photos, and even status updates to show they have a thorough understanding of the material. Check out the post, "Facebook Summit 2011, an Excellent Academic Use of the Popular Internet App" for a great example of this approach.

**Conduct Surveys or Opinion Polls Classes** that study social studies, media, film, religion, politics, and more can make good use of the social connections on Facebook to conduct surveys and opinion polls for research. Want to study family traditions? Conduct a poll amongst friends. Want to discuss cultural beliefs? Host a survey on the network.

Of course, some surveys or polls may be limited based on how many people students are able to reach through the network. However, the exercise will offer some insights, and it can teach students about concepts such as the scientific method and statistics (based on instructions for conducting proper surveys).

**Create a Group specific to your course/class.** A Facebook group is a great way to leverage the power and popularity of this application to distribute learning content and create a



central place for communication for a course or class. Check out this YouTube videos to learn more about how to do this: “Setting Up a Facebook Group for Your Class”. You might also want to check out “The Basics of a Facebook Page for Educators”.

Tap into information about specific topics Chances are there are some groups and pages out there that are focused on issues relevant to your course. Type the name of your academic subject in Facebook’s search window and you’ll automatically get a list of related content. For example, type “Algebra” and you’ll get Wikipedia’s definition, but you’ll also get a handful of pages with related focuses such as books, ‘Interest’, Groups, and more. Get creative and the possibilities are unlimited. Teaching Social Sciences? Try a search for “2012 presidential election”.

**Teach students to differentiate real news from hype and hysteria.** In many ways, Facebook is like a giant game of telephone. People sometimes hear about news, events, and products on Facebook first. Of course, rumors have a way of going viral before misinformation is corrected, and there is a challenge here to be able to differentiate legitimate information from assumptions, gossip, hype, etc. There is opportunity here to leverage this in a critical thinking context. For example, students can search other sources to validate information they come across in Facebook. The way news spreads on Facebook also offers a unique opportunity for study by students of journalism or mass media.

Facebook offers many opportunities for use in the classroom. However, its applications may not always be obvious, and some creative thinking is required. Try a few of these strategies or adapt them for the unique needs of teachers’ classroom.

#### **1.12 Social Learning Applications of Social Media in Education:**

Social media in education develops number of Social learning elements are as below:

**Engagement:** Using social media and networking tools obviously has a social aspect to it, and it requires proactive effort on the part of the user. In other words, using these tools to communicate and interact requires a student’s active engagement. Socialization also provides opportunities for emotional engagement (this article from The Chronicle discusses the importance of emotional engagement as part of the social learning process).

**Social Learning:** Bandura’s Social Learning Theory posits that “people learn from one another, via observation, imitation, and modeling”. Of course, the type of socialization that occurs via “social” computer tools is certainly different than face-to-face social interaction, but it still offers opportunities for social learning.

**Use time outside of class better, so you can use class time better:** Social learning tools also position instructors to deliver content outside of the classroom, and then “flip” the classroom - working on what would have been homework during class sometimes.

It provides opportunities for writing and writing assessment: While tools like Twitter lend themselves to abbreviated “texting” style uses of language, there is no need for this in most other forums. Teachers can choose to include grading of writing quality as part of the rubrics they develop for grading social media based assignments and class work.

**Encourage dialogue, reach more students:** It’s social! “Let’s talk”! Sometimes anything that can draw out reluctant teens and pre-teens is a good thing when the goal is to communicate. One clear advantage of socializing across the Internet is that it is seen as less intimidating those face to face contact, and can allow shy students to express themselves more comfortably.

**Help students get ahead of the professional curve:** One of the fundamental goals of education is to position young people for enjoyable, successful careers. Social media is becoming more important to business with each passing year, just discussing “social media awareness” and “social marketing” to including actually social media business planning as part of their strategic planning efforts. An increasing number of professional positions desire or require social media awareness, and it seems likely that more positions will call for this skill in the future.

**Build connections:** Using social networking tools to deliver social learning experiences in the classroom provides opportunities to meet other students and have access (depending on the tools being used) to other educators and professionals. Maintaining connections and communicating with these new colleagues has never been easier, thanks to these Internet based applications.

### **1.13 Educational Psychology and Facebook Method of Instruction**

In the opinions of Crow and Crow: “Educational Psychology describes and explains the learning experiences of an individual from birth through old age” and

Skinner: “Educational Psychology is that branch of Psychology which deals with teaching and learning”.

Thus considering both the definitions Educational Psychologists describes about the main elements of learning of the child right from birth to till death. During the learning processes, experiences acquired by the way of instruction and teaching formally and informally i.e. applications of methods, strategies and skills involved. Peal E.A.: defies: “Educational Psychology helps the teacher to understand the development of his pupils, the range and limits of their capacities, the processes by which they learn and their social relationships”. Therefore every

teacher's responsibility is desired modification of pupils' behavior to bring an all-round development of his personality, so all teachers has to know the significance of various dimensions of growth and development of every child at different stages to deliver content of subject.

Facebook is a social networking service where users create personal profiles, add other users as friends and exchange messages, including automatic notifications when they update their own profile. The researcher has utilized the features offered in the Facebook and posted the various links, videos, ppts, pdf files, notes, photos, tutorials etc., of elements of growth and development which describes about physical, social, mental, intellectual and emotional aspects of learners. The incorporated materials like videos, notes, posted on the Facebook wall describes about learning, growth and development of individual are used during formal teaching which is more effective than traditional type of teaching. Other social sites including educational sites can also be linked on Facebook method of online teaching. Informally students can read and observe materials posted on the Facebook wall any even after the college hours.

#### **1.14 Facebook and Fostering Academic Achievement**

The experimental group chosen for the Facebook method of teaching would be tested through achievement test after instruction based on the topic growth and development prescribed by the syllabus of university. This really tested effectiveness of Facebook method of teaching with that of results of traditional group. The identical question paper comprising of multiple choice type of questions is being administered to both student-teachers' under Facebook method of teaching and conventional method respectively. Student-teachers' under Facebook method of teaching absolutely enjoys with the various materials incorporated on the Facebook method of teaching. The items of the questions drafted will be given to subject experts for verification of content, grammatical and technical aspects.

#### **1.15 Facebook Fostering Social Interaction Skills**

Learning, conceived as a social activity occurring in the wider context of an integrated academic setting, requires myriad support functions. Integrating centralized learner resources, within a social context, Facebook provided the opportunities to the students to become friends so that they can exchange their views informally about the materials posted on the Facebook. Student-teachers can easily follow the videos, ppts, notes etc. and they have opportunities to comment, chat, and message on content. It helps to discuss with the teacher any time on Facebook wall informally in case if they do not have sufficient time about the doubt. Therefore, Facebook is beneficial in terms of interaction with teacher. Facebook also develop productive behavior of student, anybody can

provide supplementary materials about the content and contributes. Therefore, Facebook is a mode of high value of motivation for the learner and has user friendly operation to exchange the views.

#### **1.16 Attitude of Students towards use of Facebook**

Students always enjoy with operational features of Facebook in this mega internet communication era and feel that no difficulty in understanding the basic interactive functions of Facebook and opinioned Facebook can allow them to search interesting and imaginative work. They feel Facebook suit better our culture and identity and proliferating as learning tool in education. The pedagogic value of a course in education would be developed through Facebook method of teaching. Student-teachers' enthusiastic about two way communication of Facebook with each other and with teachers, involved in Facebook activities and integrated all forms of media, text, ppts, video, animation, scan materials of teaching. Thus, students preferring Facebook method of interaction will increase teachers' efficiency motivate joyful learning among students.

#### **1.17 Rationale of the a Study**

Researcher felt in the present mega information age in India all young generation are very much acquainted with smart phone operation, mobile phones, internet connected computer gadgets in the college and educational environment. At this time number of research works have been taking place in the western countries like USA, European countries using various internet based social media sites as instructional method formally and informally naming My space, Facebook, Twitter etc. utilized at different levels right from nursery to till higher educational institutions by the teachers whereas most negligible number of studies conducted on social media sites. The administrative bodies like UGC brought norms encouraging research and innovative works at university and college level to incorporate various instructional practices and methodology. Thus, a lead to individual growth and development of teacher and professional efficiency is also going to be heightening. The social media site mainly Facebook is very popular among Indian students community motivates the students to share their photos, videos and post the text, notes etc. Another vital feature of Facebook is links of educational and social sites which accessed very easily which are available using web 2.0 technologies. These content related interactive materials which are available on various links posted on Facebook wall could be used through classroom instruction. Thus, researcher made an effort of Facebook method of teaching formally with videos, ppts, tutorials and notes, scanned materials on Growth and Development of individual which are posted on it as a unique and innovative technique.

**1.18 Statement of the Problem**

Facebook as an Instructional Tool in Fostering Academic Achievement, Social Interaction skills and Attitude towards use of Facebook

**1.19 Objectives of the Study**

1. Construction and validation of scale on Facebook social interaction skills of B.Ed. student-teachers.
2. Construction and validation of scale on attitude towards use of Facebook of B.Ed. student-teachers.
3. To study the effectiveness of social interaction skills of B.Ed. student-teachers through Facebook.
4. To study the attitude towards use of Facebook as an instructional tool of B.Ed. student-teachers.
5. To study the significant difference between pre-test mean scores of student-teachers under instruction through Facebook (experimental) method and conventional (control) method in educational psychology.
6. To study the significant difference between post-test mean scores of student-teachers under instruction through Facebook method and conventional method in educational psychology.
7. To study the significant difference between post-test mean scores of male and female student-teachers under instruction through Facebook method in educational psychology.
8. To study the significant difference between post-test mean scores of arts and science student-teachers under instruction through Facebook method in educational psychology.
9. To study the significant difference between post-test mean scores of male and female student-teachers under conventional method of teaching in educational psychology.
10. To study the significant difference between post-test mean scores of arts and science student-teachers under conventional method of teaching in educational psychology.
11. To study the significant difference between post-test mean scores of male student-teachers under instruction through Facebook method and conventional method in educational psychology.

12. To study the significant difference between post-test mean scores of female student-teachers under instruction through Facebook method and conventional method in educational psychology.
13. To study the significant difference between pre-test and post-test mean scores of student-teachers under instruction through Facebook method in educational psychology.
14. To study the significant difference between pre-test and post-test mean scores of student-teachers under conventional method of teaching in educational psychology.
15. To study the significant difference between pre-test and post-test mean scores of arts student-teachers under instruction through Facebook method in educational psychology.
16. To study the significant difference between pre-test and post-test mean scores of science student-teachers under instruction through Facebook method in educational psychology.
17. To study the significant difference between pre-test and post-test mean scores of arts students under conventional method of teaching in educational psychology.
18. To study the significant difference between pre-test and post-test mean scores of science student-teachers under conventional method of teaching in educational psychology.
19. To study the significant difference between pre-test and post-test mean scores of male student-teachers under instruction through Facebook method in educational psychology.
20. To study the significant difference between pre-test and post-test mean scores of female student-teachers under instruction through Facebook method in educational psychology.
21. To study the significant difference between pre-test and post-test mean scores of male student-teachers under conventional method of teaching in educational psychology.
22. To study the significant difference between pre-test and post-test mean scores of female student-teachers under conventional method of teaching in educational psychology.

**1.20****Hypotheses of the Study**

1. There is no significant difference between pre-test mean scores of student-teachers under instruction through Facebook (experimental) method and conventional (control) method in educational psychology.
2. There is no significant difference between post-test mean scores of student-teachers under instruction through Facebook method and conventional method in educational psychology.
3. There is no significant difference between post-test mean scores of male and female student-teachers under instruction through Facebook method in educational psychology.
4. There is no significant difference between post-test mean scores of arts and science student-teachers under instruction through Facebook method in educational psychology.
5. There is no significant difference between post-test mean scores of male and female student-teachers under conventional method of teaching in educational psychology.
6. There is no significant difference between post-test mean scores of arts and science student-teachers under conventional method of teaching in educational psychology.
7. There is no significant difference between post-test mean scores of male student-teachers under instruction through Facebook method and conventional method in educational psychology.
8. There is no significant difference between post-test mean scores of female student-teachers under instruction through Facebook method and conventional method in educational psychology.
9. There is no significant difference between pre-test and post-test mean scores of student-teachers under instruction through Facebook method in educational psychology.
10. There is no significant difference between pre-test and post-test mean scores of student-teachers under conventional method of teaching in educational psychology.
11. There is no significant difference between pre-test and post-test mean scores of arts student-teachers under instruction through Facebook method in educational psychology.
12. There is no significant difference between pre-test and post-test mean scores of science student-teachers under instruction through Facebook method in educational psychology.

13. There is no significant difference between pre-test and post-test mean scores of arts student-teachers under conventional method of teaching in educational psychology.
14. There is no significant difference between pre-test and post-test mean scores of science student-teachers under conventional method of teaching in educational psychology.
15. There is no significant difference between pre-test and post-test mean scores of male student-teachers under instruction through Facebook method in educational psychology.
16. There is no significant difference between pre-test and post-test mean scores of female student-teachers under instruction through Facebook method in educational psychology.
17. There is no significant difference between pre-test and post-test mean scores of male student-teachers under conventional method of teaching in educational psychology.
18. There is no significant difference between pre-test and post-test mean scores of female student-teachers under conventional method of teaching in educational psychology.

#### **1.21 Operational Definition of the Terms used in the Statement**

Operational Definition of Used Terms:

##### **Facebook**

The name of a social networking site that connects people with friends and others who work, study and live around them. Students use Facebook to keep in touch with friends, post photos, text, ppt's and videos, share links and exchange other information about their curriculum content. Facebook users can see only the profiles of confirmed friends and the people in their networks.

##### **Instructional Tool**

Most educational institutions offer a number of instructional tools or a comprehensive courseware package that can be used in the service of teaching. Much of the information at Facebook and web sites can be adapted to assist in developing assignments and honing the Facebook assisted teaching skills needed to successfully incorporate instructional tools into teaching. In this case Facebook is such an internet information highway based site used as an instructional tool will be incorporated during formal and informal instruction.

##### **Fostering**

The meaning of foster is to promote the growth or development of inner abilities of an individual which is further encouraged to cherish new ideas. The Facebook social site mediated as such a technological platform that is used to feed knowledge and skill resources through formal and



informal learning environment which enhances various faculties of cognitive, social and attitudes of students through to teaching and instruction.

#### **Academic Achievement**

Academic achievement or academic performance is the outcome of education the extent to which a student, teacher or institution has achieved their educational objectives. Academic achievement is commonly measured by tests, examinations or continuous assessment. Achievement Test comprising of multiple choice objective items are structured based on content topics instructed through Facebook media meant for B. Ed. students of Karnatak University, Dharwad of Karnataka State.

#### **Social Interaction Skills**

Social interaction skills are any skill facilitating interaction and communication with others. Social rules and relations are created, communicated, and changed in verbal and non-verbal ways. Social interaction skills are personal behaviors that promote effective relationships. Supporting social interaction is an important piece of the student's educational plan, as increasing social interaction and competency are vital to overall progress.

The account holders and friends on Facebook wall would develop interaction formally and informally by means of different operational features permits massaging, chatting, discussing, video calling, posting etc. This in turn strengthens the social bondage of students proportionately sharing of perspectives of related content posted on Facebook.

#### **Attitude**

Attitude is a mental sketch about something or someone. It is a primary but generalized construct, based on the collection of an individual's experiences and is usually reflected in the behavior (Maoldomhnaigh, 2004). Attitudes provide the basis for behavioral stimulus and the purpose of the attitude decides the intensity of stimulus (Rajecki, 1990). Eagly and Chaiken, for example, define an attitude "a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor. An attitude is an expression of favor or disfavor toward a person, place, thing, or event (the attitude object). Attitude can be formed from a person's past and present. Attitude is also measurable and changeable as well as influencing the person's emotions and behaviors. The students' attitude will be measured about the usage of Facebook and its various operations to learn the content available on Facebook wall during learning process.

### **1.22 Delimitations of the Study**

1. The present study confined to pre-service teacher education in Karnataka.

2. The study restricted to student-teachers of KSS Vijayanagar College of Education, Hubli and student-teachers of KLE College of Education, Hubli
3. The study restricted to Educational Psychology subject.

The review of related literature helps the researcher to delimit and define his problem. It brings the researcher up to date on the research work which others have done and thus to state objectives clearly and concisely. It helps the researcher avoid unintentional duplication of well-established findings. It gives an understanding of the research methodology which refers to the study is to be conducted it helps to know about the tools and instruments to be used and also provides insight into the statistical methods through which validity of results is to be established. The final and important specific reason for reviewing related literature is to know about the recommendations of previous researches for further research which they have listed in their studies.

Coutts, J., et al. (2007). Prospective teachers' use of Facebook and implications for teacher education: The popularity of Facebook on their campus and on campuses across the country coupled with their colleagues' passionate reaction to prospective teachers' use of it led us to design this study. Specifically, they sought to understand their prospective teachers' use of Facebook and the implications of these findings for teacher education programs. They used a mixed-methods approach to study the Facebook profiles of 240 prospective teachers. Tentative results suggest prospective teachers had much to learn in terms of how social networking communities influence social capital, identity, social networks, privacy and informal learning. Thus, it was imperative that teacher education programs took a lead in developing research-based strategies for understanding these contexts and for making more effective the use of them in their preparation of teachers. In addition, it was important for researchers to discuss a common metric from which such data could be analyzed and discussed among their research community.

Ferdig, R.E. (2007). Editorial: Examining Social Software in Teacher Education: Faculty members in the department were assigned as advisors to numerous undergraduate teacher education students. Unlike master or doctoral advisees, these students visit academic counselors for support in choosing classes and meeting various programmatic requirements; these students seem to rarely consult with faculty unless they were taking a course with them. Faculty also generally did not hear about the students on their undergraduate advising list unless a problem arises.

Siemens, G. et al. (2007). Virtual Learning Commons: Designing a Social University: The Virtual Learning Commons (VLC) was a project initiated by the Learning Technologies Centre at the University of Manitoba, in response to the changing interests and needs of learners entering higher education. Learning, conceived as a social activity occurring in the wider context of an integrated academic setting, requires myriad support functions. Integrating centralized learner resources, within a social context, provides the foundation of the VLC's focus on meeting the needs of students with a different world view and theory of technology, content, and connectivity. Functionality from popular social networking sites, like MySpace and Facebook, is combined with the shared "to do's" of 43 Things, and tutorials and learner help resources.

Mazer, J.P., et al. (2007). I'll See You on "Facebook": The Effects of Computer-Mediated Teacher Self-Disclosure on Student Motivation, Affective Learning, and Classroom Climate: This experimental study examined the effects of teacher self-disclosure via Facebook on anticipated college student motivation, affective learning, and classroom climate. Participants who accessed the Facebook website of a teacher high in self-disclosure anticipated higher levels of motivation and affective learning and a more positive classroom climate. In their responses to open-ended items, participants emphasized possible negative associations between teacher use of Facebook and teacher credibility. Participants offered recommendations for teachers regarding the use of Facebook and other weblog services.

Saunders, S. (2008). The Role of Social Networking Sites in Teacher Education Programs: A Qualitative Exploration: This paper contributed to the growing discussion on social networking sites and education, and addressed the following question: Given the challenges to school districts and the continuing increase in their use, what role did social networking sites had in teacher education courses? On the one hand, pre-service teachers' use of these sites encouraged them to become technologically "savvy" in ways that had been rare among teachers in the past. On the other hand, use of Facebook and MySpace posed issues and problems for schools. Framed by the results of an ethnographic study, the paper argued that Facebook had a place in teacher education. Specifically, this paper discussed two emerging but related themes on professional and cultural expectations and teaching. These themes had to do with Facebook and professionalism embedded in the broader topic of teacher professionalism and global issues on teachers' uses of Facebook within and outside the U.S.

Marenzi, I., et al. (2008). Learn Web 2.0 - Integrating Social Software for lifelong Learning: Within the TEN Competence project we aimed to develop and integrate models and tools into an open source infrastructure for the creation, storage and exchange of learning objects, suitable knowledge resources as well as learning experiences. This paper analyzed the potential of

social software tools for providing part of the required functionality using a detailed scenario. It then discussed the challenges involved, focusing on interoperability, identity management and providing the right Web 2.0 tools for the required functionalities. Finally, they sketched a possible infrastructure based on Facebook, providing information propagation along a social network graph.

Tardiff III, V., et al. (2008). Facebook: The Electronic Dr. Feel-Good. In online social networks, the term "friend" describes someone with access to your profile, and whose profile you can access. This study indicated that online reputations are dependent on the number of online friends, and examined behaviors related to number of friends. Eighty-three students in a residential high school in the Northeastern United States completed an online survey relating to the number of online friends they had and their feelings about using Facebook. Sixty-nine respondents own Facebook accounts. Significant differences were measured at a  $p < 0.05$  level and were discussed.

Grant, N. (2008). On the Usage of Social Networking Software Technologies in Distance Learning Education: This paper discussed distance learning education and the usage of Learning Management Systems, as well as the possible implementation of various social networking software technologies in distance learning education courses. The traditional way of accessing and using content from the Internet was shifting to a more collaborative environment whereby individuals, especially teenagers and young adults, were using various social networking software technologies not only to create information, but in sharing it as well. Perhaps by implementing social networking software technologies in distance education courses, it may allow instructors to get to know their students better, as well as to allow for more student-to-student interactions. This paper discussed the usage of various social network software technologies, including Facebook, MySpace, YouTube, as well as Weblogs, and Wikis in order to extend teacher and student collaborations in creating online learning environments.

Heiberger, G. et al. (2008). Have You Facebooked Astin Lately? Using Technology to Increase Student Involvement: Students today network with each other using technology as much as, if not more than, face-to-face communication. College administrators must not only recognize this phenomenon, but learn to use the variety of electronic media available in positive ways: to stay connected to college social networks, promote relevant events, and help students feel safe and at home on campus. Facebook, an online communication tool that allowed users to connect individually and with large groups, began with a Harvard student who saw untapped potential in taking the college's traditional freshman directory to an electronic, student-directed format. With over 100 million active users, Facebook now holds an 85 percent market share of four-year U.S. colleges and universities (Facebook, 2008). This article explores Facebook.com's current and potential uses for increasing college student involvement. Just as students are multidimensional in

their talents, interests, and abilities, so must student affairs staff members be creative in implementing programs that support these talents, interests, and abilities. Informed by theory and practice, effective student personnel administrators will find innovative ways to involve students. Alexander Astin's theory of student involvement (1984) was a highly useful framework for evaluating how much or whether Facebook use affected student's engagement. The authors present examples and recommendations in using Facebook to increase student involvement.

Steinfeld, C. et al. (2008). Social Capital, Self-Esteem, and Use of Online Social Network Sites: A Longitudinal Analysis: A longitudinal analysis of panel data from users of a popular online social network site, Facebook, investigated the relationship between intensity of Facebook use, measured of psychological well-being, and bridging social capital. Two surveys conducted a year apart at a large U.S. university, complemented with in-depth interviews with 18 Facebook users, provided the study data. Intensity of Facebook use in year one strongly predicted bridging social capital outcomes in year two, even after controlling for measured of self-esteem and satisfaction with life. These latter psychological variables were also strongly associated with social capital outcomes. Self-esteem served to moderate the relationship between Facebook usage intensity and bridging social capital: those with lower self-esteem gained more from their use of Facebook in terms of bridging social capital than higher self-esteem participants. We suggested that Facebook affordances help reduce barriers that lower self-esteem students might experience in forming the kinds of large, heterogeneous networks that were sources of bridging social capital.

Glover, I. et al. (2008). Hybridisation of Social Networking and Learning Environments: Over the past few years, there has been a dramatic increase in Online Social Networking, both in terms of the number of web sites that offer this service and the number of users of those sites. A key aspect of Online Social Networks is that the content is user created and edited/commented upon by other users. The benefits of this type of co-operation and collaboration on the learning process have long been recognized and steps have been taken to introduce these aspects into Managed/Virtual Learning Environments. However, the social aspects of these environments were generally restricted to people with an official affiliation with the hosting organization. This paper discussed the StudyNet MLE developed by the University of Hertfordshire and the drivers behind a project to integrate social networking aspects to the system and widening access beyond the traditional community. The paper concluded with the vision for the new, more social StudyNet and some general implementation details from the early stages of the project.

Huang, W.D., et al. (2008). Correlating college students' learning styles and how they use Web 2.0 applications for learning: This survey study investigated the relationship between learning styles and utilization level of Web 2.0 applications among college students. 107 individuals

participated in this study in Spring 2008. The survey contains 118 items drawn from Gregorc Style Delineator and categories from the Unified Theory of Acceptance and Use of Technology. Results indicated certain descriptive statistical relationship and significant correlations between different learning styles (Concrete-Random, Abstract-Random, Concrete-Sequential, Abstract-Sequential) and the utilization level on six Web 2.0 applications (Blog, WIKI, online social community/Facebook, online video sharing/YouTube, online video & audio conference/Skype, social virtual environment/Second Life). The limitation of the study included small sample size and other factors influencing participants' reporting. Future studies need to further cultivate relationships between learning styles and Web 2.0 utilization level in different contexts.

Teclehaimanot, et al. (2009). Student-Teacher Interaction on Facebook: What Students Find Appropriate: More and more adults, including faculty, were joining social networking sites such as Facebook. These sites provided teachers with new opportunities to reach their students and improve their learning. However, as faculty register and begin using Facebook, they were confronted with how they should interact with students on the site. How were teachers to know which behaviors (e.g., sending friend invitations) students would find appropriate and which behaviors students would find inappropriate? The purpose of this study was to investigate how appropriate students find student-teacher interaction on Facebook. Specifically, the study looked at which types of interactive behaviors students find more appropriate as well as where differences in opinions of appropriateness might be found (e.g., sex, class rank, age).

Munoz, C. et al. (2009). Opening Facebook: How to Use Facebook in the College Classroom: The purpose of this research was to propose the idea of using the social network site, Facebook, for teacher education. Specifically, this research explored the advantages of this new Web 2.0 medium, and illustrated the different levels of course integration at an instructor's disposal. In addition, it provided specific instructions on how to use Facebook and a discussion of "best practice" policies that could be ethically implemented within the classroom. Specific attention was given to suggestions for creating a professional Facebook presence in which future teachers could emulate.

Aoki, K. et al. (2009). Telecollaboration 2.0: Using Facebook for Intercultural Exchange: Facebook for intercultural learning in a telecollaborative project linking classes in Japan and classes overseas. There was a good amount of literature already existing in the field of online intercultural exchange and telecollaboration. However, the use of Facebook in such intercultural exchange was still new and there was a dearth of literature on the subject. The paper outlined the learning design of the telecollaborative class, suggesting in-class activities using such technologies as video mail, Facebook, Google documents, and VoiceThread. The objective of these telecollaborative classes

was to foster intercultural competencies and to acquire skills to effectively utilize digital technologies, especially Web 2.0 technologies, for international communication. The paper would report quantitative and qualitative data obtained from student participants and discuss the challenges such telecollaborative projects will typically face.

DeSchryver et al. (2009). Moodle vs. Facebook: Does using Facebook for Discussions in an Online Course Enhance Perceived Social Presence and Student Interaction: In this study, we investigated the effect of using the social network site Facebook for discussions in an online course. Data were collected from concurrent offerings of an introductory educational psychology course, one using Facebook discussion boards and the other Moodle forums. We measured student perceptions of social presence and the frequency and length of their discussion interactions. Evaluation of this data indicated that there were no differences in our measures. They discussed why the potential benefits of Facebook for online teaching might not have emerged in this study and provided suggestions for further research in this area.

Olson, J., et al. (2009). Prospective Elementary Teachers Gone Wild? An Analysis of Facebook Self-Portrayals and Expected Dispositions of Preservice Elementary Teachers: This study was conducted in response to several recent incidents in which teachers and student-teachers were reprimanded for content they placed on the internet. This study examined the Facebook postings of pre-service elementary teachers to determine the extent to which these postings were congruent with expected dispositions. Profiles were analyzed to determine the appropriateness of the content, and when inappropriate, the nature of the behavior depicted on the site. Findings indicated that 32% of elementary education majors in this study had an unrestricted profile on Facebook, and only 22% of those profiles were devoid of inappropriate content. These numbers were likely conservative due to other networking sites that might be in use. The nature of the inappropriate behavior was cause for concern for teacher educators who were expected to teach and assessed dispositions and who must decide whether or not a prospective teacher was ready for the ethical responsibility of teaching children.

Gosha, K., et al. (2009). Towards the Construction of a Peer-Assisted Learning Tool using a Social Media Network: Since the mid-1990's many online communities, or online social networks, had been created. These web applications had given millions of users new ways to communicate and share information. The social networks assembled by its users could be used as a virtual learning environment (VLE) that enhances Peer-Assisted Learning (PAL). In order to increase the usability of this VLE, the online social network could be enhanced with additional features. Facebook, a popular online social network, give its users the ability to create their own Facebook applications using their proprietary markup language. By using this language, an application could



be created which harnesses most of the resources that Facebook had to offer. In order to begin populating the application's requirements, we used the 13 different organization dimensions that make up PAL. After analyzing these dimensions, 18 potential features were yielded that would be considered when this application was built.

O'Donoghue, et al. (2009). Can social networking support student retention: There was a requirement for students to 'hit the ground running', their engagement with peers, institution, faculty, department were often fraught with problems. On arrival, they had to assimilate information such as adapting to surroundings, lecturers, university systems and processes. The timetable is scheduled for academic and university processes to enable the students to study. There was little opportunity for social interaction. A group was developed within Facebook to facilitate the interaction, engagement and support of within a group of students, the aim being to develop a social identity and relationship with fellow students before arrival. With associations formed, it was anticipated that the students would be more at ease, and aid their transition into HE. Following their arrival, students were invited to participate in feedback to establish the value of the group and whether they felt that the establishment of such a group had an impact of their decision to stay or leave university, or in their reassurance, apprehension or trepidation to university.

Velasquez, A., et al. (2009). Online Social Networking Used to Enhance Face-to-Face and Online Pre-Service Teacher Education Courses: In this presentation, we would share our experiences with teaching a technology course for pre-service teachers using online social networks to enhance the course. We would begin by presenting three case studies in which two social networks were used in three different instances of the course. Finally, we would present our findings and our conclusions about social networks, how they could be used most effectively, and the advantages and disadvantages of the features in each.

Bedard, S. (2009) Creating Social Presence through Social Networking. In G. Siemens & C. Fulford (Eds.): Social networking sites had a place in education. The benefits of social networking sites to create an online social presence for students could be beneficial for academics as well. This ongoing project was to analyze the connections students in an online master's program were making with Facebook. Information on using Facebook for course work, group work, and creating an academic social network would be gathered through student surveys. This was a newly initiated project investigating a connection between social networking sites and online education.

Smith, B. et al. The "Walled Garden" approach to Social Networking: Utilizing Ning in distance education: This paper presented the initial phase of a research project on the use of a closed social network, utilizing Ning, in an online educational environment. Participants were

drawn from two online master's level courses, one that took place in a Ning, and the other in a traditional learning management system. The Ning would be used to leverage the students' use of discussion boards, by utilizing a tool that had attributes common to social networks being used outside of the classroom.

Yildiz, M. et al. (2009). Power of Social Interaction Technologies in Youth Activism and Civic Engagement: The paper discussed the impact and power of social interaction software and outlined its promising implications for education, creativity and collaboration among its users. Social Interaction Technologies and Collaboration Software had been changing the way we experienced our world. From showcasing digital portfolios (secondlife) to posting online reflections and journals (blogspot), co-writing books (wikibooks) to co-producing digital stories (voicethread, footnote), social interaction software was increasingly being used for educational and lifelong learning environments. The usage of social interaction software developed opportunities and supports "Open Learning" practices and processes, and promotes exchanges, connections, and collaboration among people who shared common ideas and interests. In our study, we explored the new generations' participation in the public good, investigated whether they use social networking for social responsibility. K12 students were connected generation for whom social networking was an essential aspect of life.

Ganster, L. et al, B. (2009). Expanding beyond Our Library Walls: Building an Active Online Community through Facebook: This article demonstrated how Facebook, a popular social networking Web site, provided libraries with the opportunity to develop an outreach presence and information portal within an online community. While much of the recent literature examined Facebook and defined its potential use within libraries, this article focused on the use of Facebook's newest feature: customizable Facebook Pages. In December 2007, librarians at the State University of New York at Buffalo began exploring the use of Facebook Pages to virtually reach out to patrons and market library services. Based on user response and Page statistics, librarians found the use of Facebook Pages provided a welcome extension of services and a unique form of outreach that reached beyond the campus community. Through a University at Buffalo Libraries Page on Facebook, librarians could update and inform students, faculty, and staff of new events, workshops, library services, and resources. Librarians at the University at Buffalo maintain an active online community that reached more than 300 fans. Fans provided discussion and feedback regarding library services, offering a more interactive extension of the Libraries homepage. This article explained the design process, including the use of third-party and custom applications. Challenges, ideas, and user response in regard to the use of Facebook Pages in a library setting were also presented.

Sokoloff, J. (2009). International Libraries on Facebook: With online social networking sites, becoming some of the most visited destinations on the Web, organizations from all countries has been scurrying to establish their presence on sites like MySpace, Orkut, and MSN Spaces. In this arena, the social networking site Facebook has become the world's most popular social networking Web site. Through its Facebook Pages service, introduced in 2007, businesses, performers, brands, public figures, and non-profit groups may establish free Facebook organizational profiles to which individual users may post comments, engage in discussions, share videos and photos, or merely identify themselves as so-called "fans." Facebook provided similar opportunities to libraries around the globe-and similar challenges. As with many commercial enterprises trying to find their footing in the Facebook environment, academic and public libraries worldwide offer examples of both promising strategies and struggling endeavors in their execution of Facebook pages. Many articles had examined U.S. libraries' Facebook efforts; this article highlights some non-U.S. libraries.

Thorpe, M. et al. (2009). Social Networking for Student and Staff learning: A project involving university tutors was using social networking tools to enable them to explore their benefits for both updating and knowledge management, and for student learning. The value of a tool such as delicious for accessing information and developing it through shared tagging and the use of networks was readily seen by tutors, who applied this approach to activities they designed for students. Working together in a defined group using detailed activity guides completed in cooperation by target dates, was essential in moving the group beyond mere registration with particular tools, and into regular use within each tutor's practice. RSS feeds, a closed Facebook group, a project wiki and email have all played specific roles in supporting the group. Resources created by the project, together with advice and examples of social networking tool use generated by these tutors, were feeding forward into continuation of the project with an expanded group of staff.

La Roche, C.R., et al. (2009). Facebook: Perils, Perceptions and Precautions: Facebook was one of the fastest growing applications of the Internet. Social networking via Facebook provided a popular way for students and others to connect with a wide audience and expand their circle of friends. Facebook account holders had been denied admission to universities, not hired for jobs, lost scholarships, and been disciplined by college administrators and arrested for online postings and exercising what they considered their right of free speech. A survey of 118 undergraduate students and 45 employers was conducted in an effort to determine their Facebook habits and perceptions about proper postings. Recent cases involving disciplinary action, restrictions on Facebook use and the First Amendment were discussed. Suggestions were made for safer Facebook protocol.

Cai, Y., et al. (2009). Building Interactive Teaching and Learning Environment for High Education in 3D Virtual Worlds: How to make the learning process interesting and engaging becomes more and more concerned by the educators and researchers. Nowadays, games, web applications and virtual world applications become more and more popular due to their rich contents and "openness". They have been introduced into the software engineering courses in the recent years. The researcher proposed to use the interactive teaching and learning strategy to teach software engineering courses. The students developed the social network applications in the 3D virtual environment (Activeworlds and Second Life), which bridged the gap between the 2D web applications and the 3D virtual applications. It promoted the students' software engineering skills with higher complexities and requirements. Moreover, the 3D virtual environments became the open platform that teachers and students communicated with each other at any time at anywhere. The course had been conducted for three semesters. Though our observations, the students enjoy the software engineering learning and master the software engineering techniques more efficient.

Moorman, H. (2009). Adventures in Web 2.0: Introducing Social Networking into My Teaching: Five months ago, the author introduced Web 2.0 technology to her students, and already, there was a story to tell. Integrating a social networking site into her teaching had been even more challenging and would prove to be even more beneficial than she could have imagined. By sharing her story, the author hoped that she could provide a road map for educators who were new to Web 2.0 and challenged those well-acquainted with it to take the Web 2.0 adventure to the next level. She shared how she integrated the use of the Internship Ning, a social networking site that served as a virtual classroom where students could discuss their internships, exchange ideas, and offer feedback and support to one another. This gave them the opportunity to benefit from everyone's insights and experiences in addition to their own. The site also had the potential to become a learning network that would link their school community with the professional community in new and dynamic ways.

West, A. et al. (2009). Students' Facebook "Friends": Public and Private Spheres: Friendship was highly significant during the university years. Facebook, widely used by students, is designed to facilitate communication with different groups of "friends". This exploratory study involved interviewing a sample of student users of Facebook: it focused on the extent to which older adults, especially parents, were accepted as Facebook friends, and the attitudes towards such friendships and potential friendships and what these revealed about notions of privacy. Parents were rarely reported to be Facebook friends, and there was a view that in general they would not be welcomed. The reasons were related to embarrassment, social norms, and worries about mothers. Underlying these were various notions of the private and the public. Students did not

appear to conceive of there being two distinct realms: indeed, the "public" appeared to be the individual's private social world. A level of sophistication was apparent, with nuanced understandings of concepts, suggesting that social networking sites such as Facebook were associated with new ways of construing some of the notions surrounding the traditional public/private dichotomy. Notions of what was private and what was public were fuzzy, with no clear-cut public/private dichotomy. Computer-mediated communication appeared to make this fuzziness more apparent than has hitherto been the case.

Madge, C., et al. (2009). "Facebook," Social Integration and Informal Learning at University: "It Is More for Socializing and Talking to Friends about Work than for Actually Doing Work": Whilst recent studies suggested that over 95% of British undergraduate students were regularly using social networking sites, we still knew very little about how this phenomenon impacted on the student experience and, in particular, how it influenced students' social integration into university life. This paper explored how pre-registration engagement with a university "Facebook" network influenced students' post-registration social networks. Research was conducted with first year undergraduates at a British university using an online survey. Students reported that they specifically joined "Facebook" pre-registration as a means of making new friends at university, as well as keeping in touch with friends and family at home. The survey data also illustrated that once at university, "Facebook" was part of the "social glue" that helped students settle into university life. However, care must be taken not to over-privilege "Facebook": it was clearly only one aspect of students' more general social networking practices and face-to-face interrelationships and interactions remained important. Students thought "Facebook" was used most importantly for social reasons, not for formal teaching purposes, although it was sometimes used informally for learning purposes.

Pempek, T.A., et al. (2009). College Students' Social Networking Experiences on Facebook: Millions of contemporary young adults use social networking sites. However, little is known about how much, why, and how they use these sites. In this study, ninety undergraduates completed a diary-like measure each day for a week, reporting daily time use and responding to an activities checklist to assess their use of the popular social networking site, Facebook. At the end of the week, they also completed a follow-up survey. Results indicated that students use Facebook approximately thirty min throughout the day as part of their daily routine. Students communicated on Facebook using a one-to-many style, in which they were the creators disseminating content to their friends. Even so, they spent more time observing content on Facebook than actually posting content. Facebook was used most often for social interaction, primarily with friends with whom the students had a pre-established relationship offline. In addition to classic identity markers of

emerging adulthood, such as religion, political ideology, and work, young adults also used media preferences to express their identity. Implications of social networking site used for the development of identity and peer relationships were discussed.

Wall, A. et al. (2009). Social Networking with a Purpose: Creating a Positive Online Profile: Many pre-service teachers were members of online communities such as MySpace and Facebook, but they were often unaware that pictures and comments posted on these and other public sites could be accessed by anyone searching the internet for their name. Principals and other administrators frequently used search engines such as Google or Yahoo to find out more information about applicants for positions in their schools. This presentation would provide access to resources that allow pre-service and in service teachers to build a positive online professional profile through TeacherPOP (<http://teacherpop.ning.com/>), a social networking Web site created for this purpose.

Selwyn, N. (2009). Faceworking: Exploring Students' Education-Related Use of "Facebook": Social networking sites such as "Facebook" and "MySpace" had been subject to much recent debate within the educational community. Whilst growing numbers of educators celebrated the potential of social networking to (re)engage learners with their studies, others fear that such applications compromise and disrupt young people's engagement with "traditional" education provision. With these ongoing debates in mind, the current paper presented an in-depth qualitative analysis of the "Facebook" "wall" activity of ninety nine undergraduate students in a UK university. Analysis of these data showed how much of students' education-related use of this social networking application was based around either the "post-hoc" critiquing of learning experiences and events, the exchange of logistical or factual information about teaching and assessment requirements, instances of supplication and moral support with regards to assessment or learning, or the promotion of oneself as academically incompetent and/or disengaged. With these themes in mind, the paper concluded that rather than necessarily enhancing or eroding students' "front-stage" engagement with their formal studies, "Facebook" use must be seen as being situated within the "identity politics" of being a student. In particular, "Facebook" appeared to provide a ready space where the "role conflict" that students often experience in their relationships with university work, teaching staff, academic conventions and expectations can be worked through in a relatively closed "backstage" area.

Schroeder, J. et al. (2009). The Chemistry of Facebook: Using Social Networking to Create an Online Community for the Organic Chemistry: What impact can Web 2.0 technologies, specifically social networking sites, have inside and outside the classroom? While participation within the Facebook community had grown exponentially across college campuses, participation in

course-specific WebCT discussion forums had not necessarily followed suit. In response to this disparity, Jacob Schroeder and Thomas J. Greenbowe created a Facebook group for Iowa State University students who were enrolled in a one-semester undergraduate organic chemistry laboratory, hoping to provide a more dynamic environment for communication among students and the course instructor. A comparison of student usage of the Facebook group with the WebCT discussion forums suggested that students use Facebook more dynamically than they use WebCT's discussion functions.

Fulkerth, R. (2009). A Faculty Development Committee as change agent and thought leader: integrating college cultures in a social networking initiative: This paper posited that opportunities exist for new thought leaders and change agents to emerge in real time during organizational change projects. A university was taking a marketing-driven approach to the use of Web-based social networking tools. Declining enrollments as well as the trend for educational institutions to use social networking tools were providing the impetus for the initiative. The university's marketing department was recently charged with creating a social networking approach to engage potential students in online environments. Members of the university's faculty development committee were members of this larger group, and determined that the marketing project did not address the scope and potential offered by other social networking tools such as weblogs and wikis. The faculty development committee began a project-within-a-project to encourage the use of weblogs among faculty members. This paper described that project.

Sturgeon, C.M., et al. (2009). Faculty on Facebook: Confirm or Deny: Since its creation in 2004, Facebook had become one of the most frequently visited websites on college campuses. Because of this rise in popularity, the subject of social networking had grown as an idea and concern for both faculty members and students. At Lee University, it had been observed that a growing number of faculty members had indeed created Facebook profiles. According to Pascarella and Terrenzini (1991), some of the most effective faculty members were those that create an informal relationship with their students. Over recent decades, numerous studies had suggested that student and faculty interaction had a notable impact on students "outcome, both in the intellectual and the social realm" (Endo & Harpel; 1982). This study examined the opinions and reactions of faculty members and students at Lee University in Cleveland, TN in reference to their use of Facebook and how it affected ones education, directly or indirectly.

Wald, M., et al. (2009). Disabled Learners' Experiences of E-learning: This paper provided an overview and initial findings of the LExDis project which was exploring the e-learning experiences of disabled learners within a UK university in order to increase understanding of the many complex issues and interactions introduced by disabled learners' requirements for accessible

e-learning, compatible assistive technologies and effective learning support. The LExDis project was relatively unique in that it was using participatory methods to enable the disabled learner's 'voice' to be heard. By giving voice to their experiences it is hoped that authentic, rich and meaningful examples, stories and illustrations can be created that help to inform the practices of lecturers and support staff.

Lego Muñoz, C. (2010). Let's 'Face' It: Facebook as an Educational Tool for College Students: Recent studies showed that 95% of university students use the popular social networking site, Facebook. We share survey data collected in the spring of 2009, from undergraduate and graduate students regarding their attitudes toward Facebook. We discussed students' perceptions of Facebook as an informal and formal teaching tool, such as its effectiveness as a communication device. We find that students use Facebook primarily for informal learning purposes, such as for student-to-student interactions about non-required course-related matters. Students also use Facebook for formal learning purposes, such as student-to-student interactions about required course components. However, students were less likely to use Facebook for informal teaching purposes, which included instructor-student communication about non-required course-related matters, and formal teaching purposes, which was instructor-student communication about required course matters that may be formally assessed.

Hansen, M.J., et al. (2010). Exploring the Effects of Social Networking on Students' Perceptions of Social Connectedness, Adjustment, Academic Engagement, and Institutional Commitment: Social networking is a tool being explored by many institutions as a means of connecting to and communicating with students. This study explored whether or not students' use of social networking services (SNSs) had significant effects on social connectedness, college adjustment, academic engagement, and institutional commitment. Students' use of SNSs did not have significant negative effects on academic performance or engagement. Results suggested that students' use of SNS with students had a strong positive effect on their feelings of Social Connectedness. However, students' use of SNSs with faculty or staff was negatively related to feelings of social connectedness, even when age, enrollment status, credits earned, and college GPA were accounted for. Students' use of SNS or Traditional Technologies (e.g., university e-mail or course-based system) with faculty or staff was significantly positively related to levels of Academic Engagement. Students prefer to use SNSs to establish social connections with friends and family rather than for academic purposes.

Teclehaimanot, et al. (2010). Student-Teacher Interaction on Facebook: What Teachers Find Appropriate: As faculty begins using Facebook, they were confronted with how to interact with students on the site. The literature provided anecdotal recommendations for how faculty



could appropriately interact with students but lack an empirical foundation. The results of a previous study on which interactive behaviors, students found appropriate indicate that students found passive behaviors more appropriate than active. Additionally, men found student-teacher interactions on Facebook more appropriate than women while no difference exists between undergraduate and graduate students, and age was not related to finding the interactions more or less appropriate. This study will investigate how appropriate faculty find these same interactive behaviors on Facebook, comparing the results to those of the previous study on students. The study would also look for relationships between the appropriateness measures and other variables (e.g., sex, age, course level, etc.) to provide a more complete understanding.

Goodman, A. (2010). Student and Faculty uses of Social Networking to Advance Learning in a Higher Education Classroom: Social networking sites (SNS) have become an integral part of life for college students, but not as much for their professors. This action research used a mixed methods technique to explore the possibilities of using SNS technology to advance learning in a college classroom and beyond. The research found four themes demonstrating that SNS could be used to achieve learning engagement. Class survey results and interviews with professors and students were presented as well as the researcher's experiences with using SNS in a higher education setting.

Raja Hussain, R.M. & Ng, H.Z. (2010). A case-study: The adoption, adaptation and transformation of Facebook as eportfolio in Higher Education: Internet-based social networking such as MySpace, Facebook, Elgg and Friendster, has the capability to provide the learning space in which students can learn about learning. The purpose of this study is to explore the experiences of students from Higher Education in adopting and adapting a social network platform, namely Facebook as part of their eportfolio. In addition to that, the research delves into the concept of social networking which advocates communities of learning in each of the student's eportfolio. Analysis were conducted from the observation data in class and the online platform, Facebook and interview data from the postgraduate diploma students (N=6). The preliminary finding illustrates that social network tools can be adopted, adapted and transformed to engage students in their learning and if the tool is framed with proper scaffolding, it can become an effective eportfolio tool

Gosha, K., et al. (2010). Developing a Framework for Teacher Professional Development Using Online Social Networks: The goal of this paper was to develop a list of core requirements that a social network application constructed for the purpose of supporting teacher professional development should include. Teacher professional development programs were crucial for the effectiveness of teaching and thus for the success of the next generation of students. With the daily use of technology through email, online shopping and online communication, they believed that

the usage of popular social applications such as Facebook would be ideal to create a community among teachers and facilitate the exchange of professional development activities.

Cain, C., et al. (2010). Social Networking Teaching Tools: A Computer Supported Collaborative Interactive Learning Social Networking Environment for K-12: The proposed research was to investigate and develop a collaborative educational environment as a tool to aid teachers in between grades K-12 in the STEM, Science, Technology, Engineering and Mathematics, disciplines. The resulting model would be used as a component of a larger learning environment that would remove the social networking taboo stigma currently associated with social networking sites. The model would extend beyond that of traditional social networking by supplementing class lectures in a fun, engaging and thought provoking manner instead of the typical classroom lectures. A survey was done to analyze the perceived effectiveness and receptiveness to the proposed educational tool as determined by K-12 teachers. This study sought to gauge teacher's receptiveness and willingness to use an online educational forum to supplement traditional classroom lectures.

Baldor, M.J., et al. (2010). Social Networking Websites: Spaces for Creating and Maintaining Social and Cultural Identity and Much More: This study investigated the use of Facebook and Orkut by a group of immigrants in the U.S. with the purpose of understanding if these social networking environments fostered social and cultural identity of participants. Findings suggested that Facebook and Orkut proved to be more than communications tools for social and cultural exchanges. Rather, they were also conduits for learning, teaching, networking, and supporting each other.

Mazman, S.G. et al. (2010). Modeling Educational Usage of Facebook: The purpose of this study was to design a structural model explaining how users could utilize Facebook for educational purposes. In order to shed light on the educational usage of Facebook, in constructing the model, the relationship between users' Facebook adoption processes and their educational use of Facebook were included indirectly while the relationship between users' purposes in using Facebook and the educational usage of Facebook was included directly. In this study, data is collected from Facebook users with an online survey developed by the researchers. The study group consisted of 606 Facebook users whose answers were examined by using a structural equation model. The analyses of the 11 observed and three latent variables provided by the model showed that 50% of educational usage of Facebook could be explained by user purposes along with the adoption processes of Facebook. It was also found that Facebook adoption processes could explain 86% of all user purposes. Finally, while Facebook adoption processes explained 45% of its

educational usage, it could explain 50% of variance in educational usage of Facebook when the user purposes were added into the analyses.

Wang, C.M., et al. (2010). Cross-cultural Online Learning Collaboration: Grouping Strategies and Assignment Designs: The purpose of this study was to investigate the pedagogical strategies for cross-cultural collaboration. Two main research questions were: 1) How to better group the students for cross-cultural collaboration? 2) How to better design course assignments for cross-cultural collaboration? By comparing two collaborative groups which include college students from the United States and Taiwan, the researchers analyzed different grouping strategies and designs of assignment to see which group and what kind of assignment works better. The data analyzed were come from the results of the students' learning satisfaction questionnaire, their reflection essays, and the grades of their course assignments. The primary findings showed that the students were very excited about the collaboration, but different time zones and the language barriers also caused some difficulties. Further data analysis is still ongoing, and the detailed findings and suggestions will be shared during the presentation.

Hughes, H. (2010). Understanding Social Media Ecologies for an Emergent Art Education through the Modeling of a Facebook Community: Investigation of the uses and meanings of social media for education and research were critical for teaching professionals in the twenty-first century. This paper presented aspects of an ongoing study of how members of an arts-based social network on Facebook co-construct and negotiate their experiences in community through hypermedia, and what these experiences mean to them. Virtual ethnographic methods and activity theory were used to collect and analyze data from participant interviews and site observations, which revealed how the affordances of social media enhance and extend community participation while altering institutionalized boundaries of traditional modes of education. A model of community-curated curriculum was developed, with implications for emergent pedagogies in the context of digitally-networked art education.

Aoki, K. et al. (2010). International Collaborative Learning using Web 2.0: Learning of Foreign Language and Intercultural Understanding: According to O'Dowd (2007), the first collaborative learning with distant partners dates back in the 1920s when French educationalist Celestin Freinet had his students publish a newspaper and exchange it with classes in other parts of the country. Since then, numerous studies and projects had been conducted connecting classes across countries for language learning and intercultural awareness. This presentation added to the wealth of literature in proposing a new design for intercultural collaborative learning utilizing Web 2.0 tools such as Facebook and Google Docs. The international collaborative classes had been conducted between Karoli University, Hungary and Kanda University of International Studies,

Japan. In the classes, both asynchronous communication tools such as Facebook and synchronous tools such as Skype were used. In addition, Google Docs, Mindmeister (a Mind map creation tool) and VoiceThread were used both synchronously and asynchronously. The observations found that students would use those collaborative tools progressively as they gained more experiences.

Eric, B. (2010). Issues and Challenges of Intercultural Exchanges using Email, Videomail and Facebook: This paper would discuss some of the issues and challenges that arise when doing internet-mediated intercultural exchanges. The author would discuss his experiences organizing online intercultural exchanges with Japanese students and students in the USA, Hungary, Turkey and Taiwan. The exchanges took place during 2008 and 2009 and utilized various interfaces, including email, videomail and Facebook. Feedback from students in the exchanges indicated that although they were impressed with the potential of online interaction to aid language learning and increase cultural awareness, they were aware of the time spent solving logistical problems and considered this when evaluating the usefulness of the online interfaces used. Suggestions for organizing online intercultural exchanges would be provided so that benefits to students are optimized.

Mohan, F. (2010). Using Social Networking Software to Increase Students' Participation in a Virtual Classroom: This paper described an experiment which to motivate students to use a virtual classroom, a virtual classroom was used to support face-to-face teaching. Students used the virtual classroom regularly, mostly because they had to. This experiment augments the virtual classroom approach with concepts from social networking to create a social virtual classroom. The aim of the experiment was to determine if social media can motivate students to willingly use the social virtual classroom. Results from the experiment indicated that using a social virtual classroom did create an open community where the students were willing to be members of. The students also displayed a lot of creativity in using this community which indicated how comfortable the students felt. A survey was conducted towards the end of the experiment and 76.9 % found that the social aspect of the community made the community more interesting.

Fattah, S., et al. (2010). Supporting Student Learning Development with Web 2.0 Technology. With the emergence of Web 2.0 applications, content creation, publishing, dissemination and communication structures among individuals, groups, and communities had significantly changed. The challenge for educators was tapping into the tools and incorporating it in a meaningful way to help the students become empowered and to take ownership of their own learning. Consequently, the role of Web 2.0 technologies was explored in supporting learning development. A discussion on the usage trends of Web 2.0 tools in an academic setting was presented and a case study of Facebook being used and utilized in a Multimedia Systems course

was described. Future study was to look at the Web 2.0 features available in the Learning Management System (LMS) that not been fully utilized by either the students or the lecturers.

Oxley, C. (2010). Digital Citizenship: Developing an Ethical and Responsible Online Culture: Responsible and ethical use of the Internet was not something that teenagers, in particular, considered to be important, and serious consequences are beginning to emerge as a result of careless and offensive online behavior. Teachers and teacher-librarians had a duty of care to make students aware of the potentially devastating effects of thoughtless, inappropriate or malicious online behavior, and to guide them into making wise choices when interacting in a digital world.

Ebner, M. et al. (2010). Has Web2.0 Reached the Educated Top: On base of a three years study about the Web2.0 competency among freshmen at Graz University of Technology they discussed the question, whether Web2.0 had become common to students of that day or not. Following the principles of Moore's Technology Adoption Life Cycle and bearing Gartner's Hype Cycle in mind, they stated that the times of early adopters were over. Those Web2.0 applications that still were not established would not gain higher. The trends had been corroborated but new ones were to come soon. Online mobility would rise with the increasing power of multiple mobile devices as well as the importance of social networking on demand. This paper outlined the progression of several common and uncommon Web2.0 applications in comparison with the results of the study as well as postulates future trends on base of it

Pikalek, A.J. (2010). Navigating the Social Media Learning Curve: In recent years, terms such as "social media" and "social networking" had become staples in the university continuing education marketer's vocabulary. This article provided both a working knowledge of the social media landscape and practical applications of the concepts using a case study approach from a Midwestern university. Throughout were a number of definitions of commonly accepted terms related to social media and examples of how it was successfully--and less than successfully--applied to programs being marketed through the University of Wisconsin Extension's Division of Continuing Education Outreach and E-Learning (CEOEL) from 2006 to 2010.

Azman, N.D. & Masood, M. (2010). Online reading through "Social Tagging": The purpose of this study was to investigate the potential use and the effectiveness of social tagging in online reading. In addition, it also looked at specific issues of learner's identity formation, learner autonomy, and empowerment. Specifically, the social networking site that this study focused on using the Facebook environment. This study would be conducted among 30 Multimedia postgraduate students for the duration of 10 weeks. A set of questionnaire would be distributed to participants before the study and to identify student's background followed by another set of

questionnaire to identify the effectiveness of social tagging in influencing learner's identity formation, learner autonomy, and empowerment would be administered at the end of the study. In addition to the questionnaire, a document analysis on the forum as well as an open ended interview would be carried out for triangulation purposes.

Chuang, H.Y. & Ku, H.Y. (2010). *Users' Attitudes and Perceptions toward Online Social Networking Tools*: The purpose of this study was to examine users' attitudes and perceptions toward online social networking tools, such as Facebook, Twitter, Plurk, and MySpace. The survey data was collected online from 43 Taiwanese Plurk users, who were located in Taiwan and the United States. The users' attitudes toward online social networking tools and their views on how the online social networking websites could be integrated into educational settings would be shared and discussed.

Han, C. (2010). *Sustaining leadership capability via media technologies: Towards social network perspective*: This study examined the effectiveness of using online social media technologies to advance collaborative coaching for novice and incumbent principals' leadership capability. It was proposed that collaborative coaching methodologies coupled with social media technologies could enhance leadership skills for principals. The preliminary evidence demonstrated positive relationship between principals' leadership capability advancement and usage of social media technologies as collaborative coaching medium. Results showed that principals found it useful to share their difficulties and successful leadership knowledge and experiences via virtual community without constraints. Further, virtual community was efficient in cost and time and effective in reaching out to diverse individuals for knowledge and experience transfer. Theoretical and practical implications were discussed.

Li, Y. (2010). *Investigation on Educational Applications in Social Networking*: This paper investigated the educational applications (ed-apps) in social networking. From looking at the current situation in ed-apps, they further investigated the existing ed-apps by categories from two social networking websites: Facebook—one of the most popular social networking website in the world and Renren—the most popular Chinese social networking website. Finally, they discussed about the opportunities and challenges for ed-apps in social networking.

Holcomb, L., et al. (2010). *Ning in Education: Can non-commercial, education-based social networking sites really address the privacy and safety concerns of educators*: The emergence and growth of social networking sites (SNSs) had been extensive and widespread over the past few years. Yet despite their popularity, recent media coverage had drawn attention to some major concerns associated with using these sites by legal minors, most notably, privacy and safety issues. As a result, many educational institutions had banned the use of SNSs. Given the academic

potential and benefits that SNSs had to offer, this paper aimed to address the integration and use of an alternative, education based SNS called in Ning in Education and advocated its importance for learning. Moreover, this paper would provide evidence detailing how alternative, education-based SNS, such as Ning in Education, could provide an enhanced venue for learning while simultaneously minimizing educators' concerns over student privacy and safety as compared to popular, commercially based SNSs, such as Facebook or MySpace. Findings from this study were supportive of the uses of SNSs in distance education course.

Roblyer, M.D., et al. (2010). Findings on Facebook in Higher Education: A Comparison of College Faculty and Student Uses and Perceptions of Social Networking Sites: Social Networking Sites (SNSs) such as Facebook were one of the latest examples of communications technologies that had been widely-adopted by students and, consequently, had the potential to become a valuable resource to support their educational communications and collaborations with faculty. However, faculty members had a track record of prohibiting classroom uses of technologies that were frequently used by students. To determine how likely higher education faculty were to use Facebook for either personal or educational purposes, higher education faculty (n=62) and students (n=120) at a mid-sized southern university were surveyed on their use of Facebook and email technologies. A comparison of faculty and student responses indicated that students were much more likely than faculty to use Facebook and were significantly more open to the possibility of using Facebook and similar technologies to support classroom work. Faculty members were more likely to use more "traditional" technologies such as email.

Graven, O. et al. (2010). Engineering students use and desire for the use of social platforms as part of the learning environment: This paper presented a survey on the students' use of and their suggestions for future use of internet based communication tools. Some of the findings were surprising as the students much prefers to communicate asynchronously with staff using e-mail and Facebook, but currently nearly all communication were via e-mail. The use of synchronous communication tools was mostly just to initiate face to face contact.

Kimura, B. et al. (2010). Technology Trends in Learning and Implications for Intercultural Exchange. In Z. Abas et al. (Eds.): Today's young adults, termed the Millennial or Net Generation, were special, sheltered, confident, team-oriented, conventional, pressured, and high achievers. They frequently communicate with peers in brief conversations online, and were active users of the Internet, especially with smart or mobile phones. This generation had embraced the recent wave of Web 2.0 application technologies that were web-based, cross platform, easy to use, and sharing oriented. This paper described technology tools that facilitate interactive learning activities as well as intercultural exchange, especially with Japanese students as they interacted with others globally.

Various tools and media resources, related to communication, networking, presentation, collaboration and media production were highlighted followed by a discussion about the potential for intercultural competency and exchange.

Liu, M., et al. (2010). How Web 2.0 Technologies Are Used in Higher Education: An Updated Review of Literature: This paper was an updated review of the literature on Web 2.0 uses in higher education from 2007-2009 using the conference proceedings from four major international conferences in instructional technology: eLearn, EdMedia, SITE, and AECT. Following what we did and reported last year at eLearning conference, this follow-up review included papers from 2009. The goals of this review were (1) to identify what Web 2.0 technologies were used in college level instruction, and (2) to examine any research evidence that Web 2.0 technologies could enhance teaching and learning. The review showed that five Web 2.0 technologies were most commonly discussed in the current literature: blogs, wikis, podcasts, social networks, and virtual environments. There was a noticeable increase in reports on uses of social networking in 2009. The findings of how each of these Web 2.0 technologies was used in higher education along with any research evidence were discussed.

Freishtat, R.L. et al. (2010). Shaping Youth Discourse about Technology: Technological Colonization, Manifest Destiny, and the Frontier Myth in Facebook's Public Pedagogy: As youths spend more time engaged in social media and informal learning experiences online, they interact with the public pedagogy of technological spaces. The public pedagogy of technological spaces, specifically Facebook, functions to create a "habitus" for the way youths act and respond in digital discourses and digital culture. This article contended that Facebook's public pedagogy sought to shape how young people view technology, and they examined the rhetorical strategies Facebook uses to both normalize and celebrate its vision of current cultural changes. They illustrated how through its discourse, specifically through a construction of a modern-day version of the frontier myth, Facebook sought to craft users with particular dispositions who behaved in particular ways online, and how it disciplines dissent on its site.

Figg, C. et al. (2010). Using Social Networks to Enhance Pre-service Teachers' Understanding of Professional Identity: A Drupal 6.0 toolkit was used to create an online social network for the Faculty of Education at Brock University in order to facilitate interaction and communication between the faculty, staff, and students. In addition to fostering intra-institutional relationships, the network was designed to foster inter-institutional connections by strengthening the faculty's rapport with the surrounding teacher community that supports the institution's mission. Data sources for the study described in this paper included statistical data in the form of frequency of visits, number of unique visitors, and length of time on the site to describe 'stickiness'



of the site, as well as content analysis of student and faculty posts and comments. Findings indicated that the use of the social network promoted professional dialog, the reduction of isolation through a supportive learning community, professional reflection, and the dissemination of ideas and resources, due to 'stickiness' of the social networking environment.

Bull, P. (2010). *I Am A 21st Century Teacher: If You Teach Me with Technology I Will Use Technology to Teach My Students*: This study focused on the perceptions of eighteen first-year Teaching Fellows (class of 2012) to technology integration in their freshman year courses, use of technology outside the classroom, perception of technology integration in 2012, and factors that influenced their self-efficacy to technology integration. In fall 2008 and spring 2009, two technology survey instruments were administered; Teachers' Attitudes towards Information Technology (TAT) and North Carolina Basic Computer Competencies for Educators modified. The pre-test and post-test mean scores of 4.77 – 5.66 on a 7 point scale show positive attitudes to technology integration. Participants also participated in a focus group discussion at the end of spring 2009 semester. Significant outcomes of this study were the depth of technology knowledge, influence of affective state towards technology, influence of prior knowledge, social uses of technology and skill levels of Teaching Fellows. Findings in this study were encouraging for the possibilities of future integration of technology in 21st Century K-12 classrooms.

Dorum, K., et al. (2010). *The Effect of Online Social Networking on Facilitating Sense of Belonging among University Students Living off Campus*: The study examined how the use of online social networking sites could help social and academic integration among students who were living off campus. Research had shown that students who live off campus during the academic year experience greater difficulty with social integration, particularly in their first year. A survey was distributed among a cohort of 370 first year undergraduate students, measuring their sense of belonging to the institution and their attitudes towards student life. Students who lived on campus and who used social networking sites reported stronger sense of belonging than students living off campus. A significant interaction effect indicated that using social networking sites reduced the difference in sense of belonging between students living on and off campus. Scores on the attitude scale were significantly related to sense of belonging. The results suggested the use of online networking could aid social integration among students who did not have the advantage of the face-to-face interaction that took place in residential life on campus.

Quan-Haase, et al. (2010). *Uses and Gratifications of Social Media: A Comparison of Facebook and Instant Messaging*: Users had adopted a wide range of digital technologies into their communication repertoire. It remained unclear why they adopt multiple forms of communication instead of substituting one medium for another. It also raised the question: What type of need did

each of these media fulfill? In the present article, the authors conducted comparative work that examined the gratifications obtained from Facebook with those from instant messaging. This comparison between media allowed one to draw conclusions about how different social media fulfill user needs. Data were collected from undergraduate students through a multi-method study based on 77 surveys and 21 interviews. A factor analysis of gratifications obtained from Facebook revealed six key dimensions: pastime, affection, fashion, share problems, sociability, and social information. Comparative analysis showed that Facebook was about having fun and knowing about the social activities occurring in one's social network, whereas instant messaging was geared more towards relationship maintenance and development. The authors discussed differences in the two technologies and outline a framework based on uses and gratifications theory as to why young people integrate numerous media into their communication habits.

Vivian, R. (2011). University Students Face-up to their Informal Learning Practices and Cognitive Learning Strategies with Facebook: This paper explored student Facebook use and practices for informal learning. Data was obtained from an online discussion group with fifteen students at the University of South Australia, as well as drawing upon student Facebook Wall activity. This research found that most students believed Facebook was a distraction and source of procrastination during study. Students fell into three groupings of student-initiated access to Facebook during study: Open Access, Restricted Access and Closed Access. Students employed cognitive learning strategies to control their access to Facebook and minimize the site as a distraction, as well as strategies to assist their learning. These findings suggested whilst there were associated advantages, use of Facebook for formal learning may pose implications for student productivity. However, explorations of student cognitive learning strategies in such contexts may assist to inform about successful learning practices.

Khaddage, et al. (2011). Facebook as a Dynamic Educational Tool in a Mobile Learning Environment: Facebook was a worldwide phenomenon and a popular multi-user social platform. It had evolved into a dynamic powerful social multimedia platform, and currently it was the most popular among users of all ages. Facebook was evolving at a rapid rate especially with the wide spread of mobile Apps for Facebook that could be integrated to fit all mobile devices. Currently it was estimated that over 200 million users use Facebook on their mobile. In this paper Facebook as an educational tool was discussed, Facebook mobile Apps which could be used for this purpose were described, potential barriers and limitations were examined, students' acceptance of this technology were assessed, security and privacy issues were also examined. The paper concluded with a critical analysis of the barriers to the successful integration of Facebook as an educational tool via a mobile phone and maps a number of developments that were underway.

Reid, J. (2011). "We Don't Twitter, We Facebook": An Alternative Pedagogical Space that Enables Critical Practices in Relation to Writing: This article explored what happened to interpersonal and power dynamics when tutors use closed-group Facebook pages as a social networking tool in their tutorial groups with first and second year Bachelor of Education (BEd) students at the Wits School of Education (WSoE). It argued that this literacy practice creates an alternative pedagogical space that enabled critical practices in relation to writing. These pages created a space that brings students' out-of-school literacy practices into a domain which normally promoted formal, academic literacy practices; a schooled space; a space where students feel safe enough to make their voices heard; a space where there were some interesting shifts in power relationships, identities, and norms of communication and modes of learning. The research analyzed the writing of tutors and students on these pages from a critical literacy perspective and made use of the critical literacy model presented by Janks (2010) to see how this space changed issues of power, access, diversity and design by creating new relationships and new forms of interaction, language and texts.

Isbulan, O. (2011). Opinions of University Graduates about Social Networks According to Their Personal Characteristics: This research aimed to determine opinions of university graduates about social networks according to their personal characteristics. The research was conducted on 203 university graduates who received teacher training at Sakarya University in 2010-2011 academic year. Two different data collection tools were administered to the participating university graduates and correlation analysis was conducted in light of data collected from the tools above. As is widely accepted by the technology users, Facebook, the most used social network in Turkey and across the world, was selected as the social network for the research. A positive and significant relationship was found among Facebook-related opinions stated by university graduates having an extravert personality as a result of data collected through the Eysenck Personality Questionnaire-Revised/Short-Form and Opinions of University Graduates about Social Networks data collection tools.

Zahidi, Z., et al. (2011). Facebook Features: Enhancing Student Engagement in Self-Regulated Learning: The purpose of this paper was to study the student engagement in self-regulated learning within a Facebook environment. The features of Facebook that could foster student engagement in self-regulated learning had been identified and investigated in this study. A Facebook Group (FG) was created to connect a group of postgraduate students and a lecturer with shared-interest of knowledge and experiences. A qualitative method had been adopted in this study. Students' postings in the FG had been collected and analysed using document analysis in the dimension of participation and were strengthened through students' interview to identify the preferred Facebook features. The evidence from students' participation indicated the student

engagement in self-regulated learning. The results revealed that Tag and Notifications features were capable to increase student engagement. The sense of awareness of academic value in Facebook is created through such engagement.

Sarsar, F. et al. (2011). Facebook as an Online Learning Environment: Perceptions of Undergraduate Students: Facebook was the most popular social network service provider among university students. It could be assumed that the use of social networking could facilitate the application of e-learning in higher education. This study conducted a survey of eighty-nine undergraduate students to examine their attitudes toward Facebook as a potential learning environment. The gathered data were qualitatively analyzed. Students reported that they would like to be a part of online learning environments, but that they don't rely on social networks for providing quality education. They feel that online learning environments should be safe and protected. Therefore, it seemed important to know the characteristics of successful online students. The facilitator of online learning should be very attentive to the individual characteristics of learners. Needs of some students might not be met while using Facebook or other online social networks a learning environment.

Ebner, M., et al. (2011). The Facebook Generation Boon or Bane for E-Learning at Universities: No other social community had been that booming ever than Facebook. A query among freshmen at Graz University of Technology (TU Graz) displayed this strongly ongoing trend too. Compared to the freshmen-studies of the last three years they could demonstrated the way Facebook already influenced the communication behavior of today's students. Did the use of Facebook lead to a more competent understanding and intensive practice of Web2.0 applications in general? Did Facebook paved the way for Web2.0 or absorbs it by implementing and enabling Web2.0 functionalities on the platform? And what did this mean for teaching and learning aspects so far? Using a couple of statistical analysis methods for complex investigations we tried to answer these questions and found out that the usage of Facebook already leaved it's marks on the communicational behavior of students. An influence on the usage of other Web2.0 applications could not be stated with significance so far but it seemed that Facebook had a repressive factor rather than a promotive one; it served as a substitute for them.

Pollara, P. et al. (2011). Social Networking and Education: Using Facebook as an Edusocial Space. In M. Koehler & P. Mishra (Eds.): The acceptance of Facebook by school-aged users was evident, but the potential to using social networking sites for educational purposes was still being debated. This paper explored the use of Facebook within a high school science-mentoring program. Results indicated that the use of Facebook positively affected the relationships

between mentors and mentees. In addition, students believed that they learned more by using Facebook and would like to use Facebook for other educational purposes.

Phosaard, S. et al. (2011). Facebook vs. Moodle: The Learning Effectiveness of Students Exposed to Daily Quizzes on Computer Programming Course: This study assessed the effectiveness of using the Facebook as an alternative mean for delivering daily quizzes comparing to a Learning Management System (LMS). The use of Facebook was a common practice of undergraduate students' life. It was an opportunity to integrate a proven to be effective method, daily quizzes, to improve learning efficiency into students' day-to-day activities. The study treated two groups of students enrolling in a computer programming course with daily quizzes—one group delivered in a LMS, Moodle, another group exposed quizzes via Facebook—for eleven weeks. The results suggested that the learning effectiveness of both groups were not significantly different. The study suggested that it was promising to apply this innovative way of seamlessly and casually integration of this learning technique into real-world practice.

Mazman, S.G. et al. (2011). Gender Differences in Using Social Networks: The purpose of this study was to determine individuals' usage purposes of social networks with a focus on the possible differences between females and males. Facebook, which was one the most popular and being most widely used social network, was investigated in this study. The study group consisted of 870 Facebook users who responded to an online survey designed by the researchers. Analyses of the results showed that usage purposes could be categorized under four categories, namely maintaining existing relationships, making new relationships, using for academic purposes and following specific agenda. Significant differences were found between genders in all of the purposes mentioned. While the difference on making new contacts was in favor of males, the differences on the other three user purposes were in favor of females.

Muhametjanova, G., et al. (2011). Using online social networking: Graduate students' gender differences in using Facebook: This study investigated the reasons of using Facebook by male and female graduate students at Middle East Technical University. Qualitative interviews were conducted with students to identify why males and females use Facebook, and for what purposes did they use Facebook. As the result of this study, the differences between male and female students in using Facebook and reasons of using Facebook were identified, so that educators might benefit by learning about the potential of Facebook to be used for educational purposes.

Cardenas, F. et al. (2011). EFL Students Speaking Their Minds to the World through Facebook: Curriculum Innovation at a Language Institute in Bogota, Colombia: The concept of technology had become a major theme of research and practice at a language institute in Bogota,

Colombia. This study focused on the teacher-researcher experience when observing how the contents of the curriculum were evident when analyzing student's interaction in an asynchronous virtual space. Facebook was taken for this study as the virtual environment to promote students' real interactions in the foreign language and as an opportunity for the teacher to link language contents from the course with technology. At the Centro Colombo Americano (CCA) teachers were requested to incorporate in their classes technologies that facilitated students gain autonomy to learn. Although different teachers use technology in their classes, sometimes it remained in isolated activities that did not accomplish the objectives of constant interaction.

Lee, J.W.Y., et al. (2011). Creating the intercultural learning narrative using social network sites status updates: An innovative approach in using social media: The growing use of the social media phenomenon was synonymous with words such as Facebook, Twitter, Web 2.0 and blogging. Teenagers today embraced social media through their active use of multiple social network sites and what made social media social and attractive to users is that users were encouraged to share as much information as possible with other their peers of the site. This growing trend in the use of social media opened up a possibility for researchers to harness information from this media. In this paper, we described how we used the status updates from an exchange student during his time abroad to create a narrative of his experience aboard

Herguner, G. (2011). Opinions of Students in Physical Education and Sports Teaching on the Use of Social Network Sites: Because an important period of daily life had been spent on the Internet, the way people communicate had recently changed. One of the most important reasons for this change was social network sites (SNS). It could be seen that the most adhesive users of SNS in Turkey which had gained an increasing global quality were students. This descriptive study was made in order to determine the aims of 180 students who attend Sakarya University (SU) Physical Education and Sports Teaching Department (PESTD) in 2010 to use SNS, the duration they use SNS and their opinions on the credibility of SNS. Data were obtained through an interview and a questionnaire established by the researcher. They were evaluated by the program SPSS 15.0. In the statistical evaluation factor analysis, T-test, ANOVA and Chi-Square tests were implemented. At the end of the study, it was found that the participants use SNS mostly in order to learn what their friends were doing (66,7 %), to spend time (57,2 %), to be informed about sports organizations (55,6 %); and that they used the Internet to log in SNS (53,9 %) 1-2 hours (40,6 %) or less than 1 hour (24,4 %) a day. Moreover, it was found that SNS cause interference in their private lives (58,4 %); their negative effects were more than positive ones (46,2 %); and SNS were not safe (43,9 %). When results were evaluated generally, it could be said that the participants were conscious of SNS and the Internet.

Aoki, K. et al. (2011). Project-Based International Collaborative Learning using Web 2.0 Tools for Authentic Learning of Foreign Language and 21st Century Skills: Web 2.0 tools and social networking approaches gave unique opportunities for students across national borders to communicate and collaborate. They were especially suitable for fostering foreign language learning and intercultural understanding as well as 21st century skills as they give authentic learning for students to practice the above skills. This paper described a case of a joint tele-collaborative class between a class in Karoli University, Hungary and that in Kanda University of International Studies, Japan, The students in two classes compare and contrast information on a selected topic and collaborate on final presentations. In the class, both an asynchronous communication tool (i.e., Facebook in this case) and a synchronous tool (i.e., Skype in this case). In addition, a collaborative tool (i.e., Google Docs) and a presentation tool (i.e., VoiceThread) were used both synchronously and asynchronously. The observations found that students would use those collaborative tools progressively as they gained more experiences.

Hemmer, H. et al. (2011). A Facebook® Production Planning aming App as a Part of a Knowledge Management and Extension Concept: A Facebook E-Learning application was presented, that was part of a comprehensive software concept for a knowledge management and extension system. The Open Fred project aimed to create an information and experimentation system to develop, test and learn about scheduling algorithms. The goal was a benefit for all parties involved - researchers developing algorithms, students as well as production planners in enterprises seeking an oversight of what methods were available that day and how they performed in simulation. The E-Learning application acted as an interface for accessing Open Fred Digital Factory core. It used the stored configurable planning algorithms and performed simulations to measure the outcome of the chosen parameter set. Facebook apps lower inhibition threshold a user is confronted with compared to a conventional system with its own login and user interface. Competition between the learners (option to post the planning outcomes to their public wall) furthermore raises the motivation.

Wolf, D., et al. (2011). Interactive Technologies: Enhancing Academic Learning and Stimulated Student Engagement with Social Media: Social media and web 2.0 applications were ubiquitous within the online environment that most students visit regularly. Here they presented examples of how these tools offer the potential to carry out asynchronous learning regardless of their limitations. Specifically, they explored the use of Delicious, YouTube channels and other video applications, and embedding a Facebook discussion board with a class. Currently, we were collecting data for their assessment. Nonetheless, our first pilot had revealed surprising successes and hinted to how easily a mobile element could be added to courses.

Forgasz, H., et al. (2011). Facebook and gendered views of ICT. In S. Barton et al. (Eds.): Using an innovative recruitment tool, the social network site Facebook, survey data were gathered from a sample of the general public in Australia and elsewhere in the world. Views on the gendering of mathematics, science, and ICT were garnered. In this paper, they reported the findings from only four of the questions from the survey, and only data from Australians. The findings revealed that the majority of the Australian sample was not gender-stereotyped about the use of technology (computers and calculators) and related careers. However, if a gendered view was held by respondents, it was overwhelming in endorsing the male stereotype.

Yamamoto, J. (2011). The Muddy Field of Social Networking: Implications for Teacher Educators: Social networking tools such as MySpace and Facebook were extremely popular among college students. Although teacher candidates might use social networking on a daily basis, not all of them balance out their freedom of speech and moral behaviors expected of educators. Possible consequences might be denial of teaching certificate, lost job opportunities, or dismissal from employment. Teacher educators could mitigate such damages by sharing moral expectations by teachers from students, parents, and school districts. They may also show perspective teachers how to create a positive, ethically appropriate online portfolio. This paper will first mention needs of online morality education by (1) referring to cases of teacher dismissals and (2) illustrating the gap of required knowledge and actual knowledge about acceptable online behavior among pre-service teachers. Finally, it will explore a future direction for online credibility management education and a related research.

Shih, C. et al. (2011). Web 2.0 Tools for Learning in Higher Education: The Presence of Blogs, Wikis, Podcasts, Microblogs, Facebook and Ning: In a few short years, changes in technology had led the Internet to become a more networked place than ever before; thereby enabling communication, sharing, and participation in public discourse on a much wider scope. This paper was an overview of how some of the Web 2.0 tools were currently being used in higher education. Learning approaches (formal, informal, collaborative, and constructivist) relevant to Web 2.0 tools (blogs, wikis, podcasting, microblogging, Facebook and Ning) were described. Overall, these tools were found to promote community building, enhance social presence, and facilitate communication. Moreover, they contributed to the increasing "openness" in the learning environment, and were often blended naturally with cloud computing. The conclusion includes highlights of the gaps in the current literature, limitations and general recommendations for future directions in using these tools in higher education.

Gyabak, K. et al. (2011). An Evaluation on the Efficacy of Social Networking Tools to Enhancing Active Learning and Promoting Lifelong Learners in Online Graduate Nursing Education:



Nursing education had seen an increasing growth in distance learning programs to meet the healthcare needs of the population. In an effort to maintain the quality of online nursing education programs there was an imminent need to reflect on current instructional strategies and explored the possibilities of merging new social networking technologies such as Twitter and Facebook into these practices to enhance active engagement and inculcate a knowledge society of learners. This paper discusses practical and dynamic ways to use these up and coming social networking tools in online graduate nursing courses. Based on conclusive classroom evaluations that measured the relevance and efficacy of these technologies, this paper seeks to list out the challenges and best practices for educators who were interested in incorporating these technologies to in an effort to create engaging online learning experiences and improve learning outcomes in their online and blended classrooms.

Khaddage, F., et al. (2011). Mobile Apps Integration for Teaching and Learning. (Are Teachers Ready to Re-blend?): The challenge of experimenting with new mobile technological innovations for teaching and learning was a constant factor for teachers at universities. This paper examined some important features that mobile phone Apps could bring to the learning environment, and how these features were crucial to education. But were teachers ready to apply these Apps in their daily professional work. Were they prepared to integrate them? The role of teachers in today's learning environment was also discussed. The re-blend of educational Apps were described and how this could serve the emerging mobile learning process and delivery needs of the learning community. This would provide a well-balanced learning environment that met the digital learners' needs and supported learning experiences that were collaborative, portable, flexible and accessible, and could be integrated with the world globally, beyond the traditional classroom.

Matasic, I. et al. (2011). Virtual Learning Environment in Primary Education – Big Challenge for Teacher: It was a great challenge how to integrate ICT in everyday process of teaching and learning and how to motivate students for using computer in learning. Was it possible for teachers to create new learning environment where learning can be fun? They ask for help our students and their opinions how e-learning environment should be. This paper analyzed students' feedback and their frequency of using ICT for learning. Online survey was carried out in two Primary schools in Croatia, among students from fifth to eight grades. Students' answers indicated that learning environment had to evolve from fun and playful to fun, playful and Facebook-like. Teachers could reach and motivated student not only through video games, but they have to overmaster social networking too if they want to increase interest for learning.

Rouis, S., et al. (2011). Impact of Facebook Usage on Students' Academic Achievement: Role of Self-Regulation and Trust: The paper provided a preliminary analysis of the effects of Facebook usage by undergraduate students at Lulea University of Technology in Sweden. The proposed research model tested the perceived effect of personality traits, self-regulation, and trust on students' achievements. Based on flow theory, the model suggested negative mediating effects of the use and cognitive absorption on Facebook, concluding that a decrease occurs in students' academic performance but a positive effect on satisfaction with life that would limit this undesirable effect. Paper and pencil survey was run with undergraduate students from Lulea University of Technology and data from 239 students were used to test the model. SmartPLS software was employed to test the proposed structural equation model. Results indicated an extensive use of Facebook by students with extraverted personalities leading to poor academic performance. However, students who were more self-regulated more effectively control their presence on these platforms. Trust in people does not affect their presence and interaction on this platform. Yet students' cognitive absorption with Facebook was only regulated by their self-control and their personality traits, which determined how much time they spend on Facebook. Multitasking skills moderated the effect of cognitive absorption on academic achievement, but they did not impede the time spent, frequency, or nature of use or their effect on academic results. Although students' satisfaction with life significantly declined due to cognitive immersion into Facebook, it appeared not to play an effective role in the students' academic achievement. However, their performance goal orientation was shown to be a crucial determinant of their university accomplishments, which would limit the critical effect of their presence on the Facebook platform. Results supported in part earlier conclusions about personality traits that rule the presence on Facebook. Trust did not impede on Facebook usage as it determined surfers' use of Internet. Self-regulation and performance goal orientation characterized the students who are more in control of this social activity. In turn, this prohibited the apparent negative effect on their academic performance. Results helped students to understand the preliminary consequences of their extensive usage of Facebook and to better manage their social activities on this platform.

Caudill, J. (2011). Media-rich Social Networks: Open Source Solutions to Media Creation: Today's students were spending large amounts of time online, most frequently on social networking sites. These sites, which were content management systems, can offer great potential for online and blended learning. This chapter introduced the technologies associated with creating media-rich social networks and how open source solutions could provide the tools to create media and also to integrate social networks with Learning Management Systems (LMS).

Gilewicz, N. (2011). Teaching the Net Generation: Exploring Networked Learning and Digital Collaboration Methods: Research had shown that that day's digitally native students had learning styles and preferences, which were typically in opposition to traditional academic teaching approaches. The result was an educational system that was fighting to engage students. This paper presented work in progress on the topic of online engagement using online social networks such as Facebook. Two exploratory studies that used an online learning system were discussed. The results exploited some of the weaknesses of these systems, namely their difficulty in connecting users conveniently. Thus, the next phase of the research was to leverage an environment more familiar to the students, in order to improve engagement. The goal was to use the technology in such a way that the activity was collaborative, customizable, connective, and convenient. Rooted in current research, the possible benefits and risks of using online social networks for formal learning are discussed.

Istifci, I., et al. (2011). An Effective Role of E-Learning Technology for English Language Teaching by Using Meta Communication Actors: Meta communication plays a key role in foreign language learning and teaching. Broadly speaking, Meta communication was communication about communication. Meta communication was something that went beyond communication and all language learners and teachers should be familiar with its existence. It should be stressed that Meta communication which accompanies any message was very powerful. In face to face writing lessons, the student could make emphasis on any point by utilizing larger fonts, capital letters, or bold fonts in his essay. However, in virtual learning environments, students can make use of emoticons like :-)"Happy", :-( "Sad",;:/ "Perplexed", O.o "confused" to communicate about communication. Further, they can deploy some acronyms like (BTW=By the way, ASAP=as soon as possible, TM=tomorrow) to easily convey their messages. It should be emphasized that E-learning applications (virtual worlds, second life, ICTs) were very beneficial in foreign language learning and teaching since they created a platform for students and teachers to interact in a context with no boundaries of time and distance. In Transformational Generative Grammar, foreign language teachers described syntactic structures in English by using grammatical symbols with meta communicational elements. For instance, every English Foreign Language-EFL or English Language Teaching-ELT teachers or students is familiar with the symbols and related meanings like (S=sentence, subject, V=verb, O=object, N=noun, NP=noun phrase, VP=verb phrase, etc.). On the other side, when teaching English pronunciation to Turkish EFL learners, foreign language teachers utilize phonetic symbols like /e, ae, a, g, wn/ to write transcriptions of English words. These phonetic symbols have Meta communicational elements in their composition because they communicate about communication. At this juncture, foreign language teachers should learn

frequently used emoticons, keyboard symbols, acronyms, grammatical and phonetic symbols and they should teach them to their students to enable them to establish successful communication with other people. Globalization was consolidated by the extraordinary invasion of higher education by new technologies, especially the Internet. Major changes in the social and economic conditions in Europe and worldwide force new needs and trends upon the technology. The main challenge for "the knowledge society of the future" was to ensure that each member of the society has the opportunity of continuous professional development, frequent retraining and obtaining new competences, mastering new information technologies (IT), lifelong learning (LLL), and so on. Within the education sector, a number of continuous efforts were taking place to stimulate the use of ICT at all levels of education. E-Learning had introduced new approaches of instructional delivery where the roles of teacher and student had significantly changed. The integration of information and communication technologies into the education field was in constant progression and generated empirical approaches for educational environment design. Some research projects in distance learning were introduced in the world.

Lampe, C., et al. (2011). Student Use of Facebook for Organizing Collaborative Classroom Activities: Social network sites such as Facebook were often conceived of as purely social spaces; however, as these sites had evolved, so had the ways in which students were using them. In this study, we examined how undergraduate students use the social network site Facebook to engage in classroom-related collaborative activities (e.g., arranging study groups, learning about course processes) to show how Facebook might be used as an informal tool that students use to organize their classroom experiences, and explore the factors that predict type of use. Data from two surveys (N = 302, N = 214) were used to analyze how Facebook use, social and psychological factors, self-efficacy, and types of instructor-student communication on Facebook were related to positive and negative collaboration among students. We found that predictors of Facebook use for class organizing behaviors include self-efficacy and perceived motivation to communicate with others using the site. When placed in the context of social and psychological factors, Facebook intensity did not predict either positive or negative collaboration, suggesting that how students used the site, rather than how often they used the tool or how important they felt it was, affected their propensity to collaborate.

Siegle, D. (2011). Facing Facebook: A Guide for Non teens: Facebook was a social networking phenomenon that had taken the United States by storm and gained universal popularity. Facebook had more than one-half trillion members; one out of every twelve people on the planet has a Facebook account. Some argue the interactive nature of social networking sites (SNSs) such as Facebook, as well as other interactive technologies such as video gaming and virtual

world experiences, could radically change the educational system. They suggested that these technologies provided opportunities to better motivate students by engaging learners rather than allowing learners to function primarily as passive observers of the educational process. The purpose of this article was threefold. First, educators could not ignore the important role that social networking sites such as Facebook and MySpace play in young people's social and self-development. Having a social networking account was a rite of passage, and educators and parents need to understand the important developmental role these sites play. Second, everyone using social networking sites should be aware of privacy issues and social expectations associated with their use. Finally, educators, like those in the business world, could begin to explore how to harness the power of social networks such as Facebook to enhance student learning opportunities and possibly change the landscape of education.

Franklin, T. (2011). *Mobile Learning: At the Tipping Point*: Mobile technologies were interfacing with all aspects of our lives including Web 2.0 tools and applications, immersive virtual world environments, and online environments to presented educational opportunities for 24/7 learning at the learner's discretion. Mobile devices were allowing educators to build new community learning ecosystems for and by that day's students using smart phones, iPads, tablets, and iPod devices to stay connected. The use of simulations and virtual environments to build learning spaces that provided connections to students globally and how these twenty first Century digital interfaces would challenge our educational institutions to create a more rigorous, immersive, and differentiated learning environments would be explored in an attempt to answer the question: Mobile learning, were we at the Tipping Point?.

Reiners, T., et al. (2011). *Effects of Social Network Profiles on E-Recruitment: An International Study*: The exponential growth of Social Networks offered them manifold opportunities by being part of a large network. They are able to have immediate updates of (international) events and share information. The advantage was paired with risks about potential influences on social life. With everyone was being able to submit information, it was likely to be presented in an inappropriate way in public. And this could happen without even noticing, e.g. if a connected friend is publishing the information. In this paper, they presented an international study where they asked many students about the awareness of their profiles in Social Networks and if they believed that this could influence their job applications. The study was matched with a survey of human resource manager if and to what extent they use information being visible in Social Networks. The poster visualized the results for countries like Germany, U.S., Afghanistan and China and demonstrated how different the perception of Social Networks still was.

Lin, G.H.C., et al. (2011). Computer Games Functioning as Motivation Stimulants: Numerous scholars had recommended computer games could function as influential motivation stimulants of English learning, showing benefits as learning tools (Clarke and Dede, 2007; Dede, 2009; Klopfer and Squire, 2009; Liu and Chu, 2010; Mitchell, Dede & Dunleavy, 2009). This study aimed to further test and verified the above suggestion, employing computer games as in-class formal or after-school leisure tasks for language learning and educational purposes. In spring semester, 2011, this research project related to on-line game play was conducted in a Taiwanese university, where two classes of fifteen and thirty men freshmen had provided their perceptions. Participants were suggested to select free on-line games during the first week and then inspected relations between the games and language education purposes. It was assumed participants might support or decline the concepts that educational objectives and effectiveness could be found in games. In the eighteen-week research, more than twenty games with educational functions were demonstrated and presented. The results showed participants regarded the games to be motivation stimulating. Three on-line free games on Facebook, Pet Society, Country Story, and City Ville, were nominated to be effective motivation stimulants. In this study of Facebook applying for language learning, each game was recommended by more than three students, with higher percentages than the other on-line games on diverse websites. Three advantages had been emphasized by the presenters. First, the games contributed to reading game descriptions bilingually to thoroughly complete missions. Second, game-based learning allows players to establish abilities of social interactions with the other on-line players in the identical game. Third, computing-mediated environment builds the learners' concepts of managing and administrating a government, a farm or a pet shop. This study implied the appropriateness and applicability of game-based teaching and learning. It did not only provide evidences of learners' excitements and supportiveness by qualitative narrations, but also contributed to providing pedagogies on how game-based curriculum could be more formally realized in second language learning classroom.

Wise, L., et al. (2011). Facebook in higher education promotes social but not academic engagement: Although there was evidence that academically successful students were engaged with their studies, it had proved difficult to define student engagement clearly. Student engagement was commonly construed as having two dimensions, social and academic. The rapid adoption of social media and digital technologies had ensured increasing interest in using them for improving student engagement. This paper examined Facebook usage among a first year psychology student cohort and reported that although the majority of students (94%) had Facebook accounts and spent an average of one hour per day on Facebook, usage was found to be predominantly social. Personality factors influenced usage patterns, with more conscientious

students tending to use Facebook less than less conscientious students. This paper argues that, rather than promoting social engagement in a way that might increase academic engagement, it appears that Facebook is more likely to operate as a distracting influence.

The goal of this study was to investigate the effect of integrating "Facebook" and peer assessment with college English writing class instruction through a blended teaching approach. This blended approach consisted of one-third of a semester of classroom instruction and two-thirds of a semester combining "Facebook", peer assessment, and classroom instruction. The subjects were twenty-three first-year students majoring in English at a technological university in Taiwan participating in an eighteen week English writing class. The students were divided into three groups with three "Facebook" platforms. Both quantitative and qualitative approaches were employed in the study. Research instruments included pre-test and post-test of English writing skills, a self-developed survey questionnaire, and in-depth student interviews. The findings suggested that incorporating peer assessment using "Facebook" in learning English writing could be interesting and effective for college-level English writing classes. Students could improve their English writing skills and knowledge not only from the in-class instruction but also from cooperative learning. In addition, this "Facebook" integrated instruction could significantly enhance students' interest and motivation. Finally, the findings might provide useful instructional strategies for teachers of ESL English writing courses.

Shih, R.C. (2011). Can Web 2.0 Technology Assist College Students in Learning English Writing? Integrating "Facebook" and Peer Assessment with Blended Learning: This article examined the case of the Winston Society, a short-lived wikispace created by a high school English teacher to foster collaborative knowledge-making and social activism among educators. Through an examination of the wiki, questionnaires, and a focal group interview, this paper described an examination of reasons the Winston Society garnered limited uptake among classroom teachers. Scholarship in new literacy studies was then drawn upon to theorize key issues in the study, including teachers' discomfort with digital epistemologies and the potential of online affinity spaces and social media to mediate teachers' professional development, networking, and political activism. The purpose of this paper was to highlight key issues and tensions in this case that might help educators approach Web 2.0 technologies more strategically in other contexts of teacher education.

Brass, J. et al. (2011). The (Failed) Case of the Winston Society Wikispace: Challenges and Opportunities of Web 2.0 and Teacher Education: There had been many claims about the characteristics of the new generation of 'digital native' students participating in higher education. The lack of empirical evidence upon which many of these early claims were based had been

highlighted in a number of studies investigating students' technology ownership. However, very few studies to that date have explored in detail students' day-to-day interactions with technology and the impacted on their academic studies. In the current project, multiple case studies were compiled to provide an in-depth exploration of technology use across university students' everyday life and academic study contexts. This paper reported on one of these case studies as a profile of a 'digital native' student who, whilst considering themselves advanced users of technology, still demonstrated a wide variance in adoption and appropriation of technology challenging the notion of a homogeneous generation who share common technology-related characteristics.

Corrin, L., et al. (2011). *The Life of a 'Digital Native': Generation was often used to explain and rationalize the use of information and communication technologies (ICTs) in higher education. However, a comprehensive review of the research and popular literature on the topic and an empirical study at one post-secondary institution in Canada suggested there were no meaningful generational differences in how learners say they use ICTs or their perceived behavioral characteristics. The study also concluded that the post-secondary students at the institution in question use a limited set of ICTs and their use is driven by three key issues: familiarity, cost, and immediacy. The findings were based on focus group interviews with sixty nine students and survey responses from a random sample of four hundred thirty eight second year students in fourteen different programs in five schools in the institution. The results of this investigation added to a growing body of research that questions the popular view that generation could be used to explain the use of ICTs in higher education.*

Bullen, M., et al. (2011). *Digital Learners in Higher Education: Generation Is Not the Issue: This presentation described curriculum initiatives that involve students working on real-world digital media initiatives with corporate and government clients, and how the use of popular social media platforms and other online resources facilitate a client-based, team-oriented development cycle within the curriculum. Selected students who participated were interviewed, and their feedback indicated that this aspect of their academic experience was a significant highlight in their curriculum. Positive and negative impacted on traditional curriculum and learning methodologies were identified, and assisted in planning subsequent phases. Sample application prototypes, Facebook groups and online marketing strategies were created for demonstration, and enhancements to learning outcomes and long-term success/job creation outcomes for participants were realized in: Increased industry and job success, and continuation of this formal collaboration into the commercialization phase.*

Nisselle, A., et al. (2011). *Linking and learning during hospitalisation: learning technologies connecting adolescents to school and social networks. In T. Bastiaens & M. Ebner*



(Eds.): Adolescents who spent time in hospital for their health care face significant challenges in terms of their continued education. The hospital as an out-of-school setting provided opportunities for innovation to develop this as a site that was conducive to adolescent learning. This paper reported on the contribution of learning technologies such as laptops and netbooks towards developing a learning culture for adolescents attending a leading pediatric hospital. Fifty-seven adolescent participants were recruited as part of a larger study and completed surveys detailing their use and opinion of netbooks and other portable computers within the hospital. The results highlighted the importance of access to both informal learning opportunities and social media for these adolescents and the capacity of a pediatric hospital to create an environment where learning stays relevant to patients' lives.

Che Teh, N. et al. (2011). Integrating Social Networking Elements In to The Teaching of English In A Primary School Classroom in Malaysia: Overcoming Challenges and Celebrating Success: This was a personal observation and re-learn process about what's, how's and why's of using web 2.0 and social networking tools with elementary age students to enhance learning and student engagement. This paper discussed the process of integrating social networking elements into the learning of young children in Malaysia. It outlined the significance of internet technologies, mobile learning and social networking elements and the educational benefits of this integration for young children. It also identified key challenges to successful ICT integration and suggested how some of these challenges could be embraced and overcome. Lastly, it provided examples of successful ICT integration in early childhood classrooms in particular the usage of blogs, podcasts, wall wisher and as well as Edmodo which was agreed and pronounced by the young learners themselves as the most interesting and promising tool in learning English as a second language.

Liu, M., et al. (2011). Web 2.0 in Higher Education: Levels of Awareness and Patterns of Use: Web 2.0 technologies are increasingly being incorporated into facets of everyday life, the workplace, and academic settings. Educators were exploring the possibilities and opportunities that these technologies could offer. While there was much excitement about the pedagogical potential Web 2.0 holds, little was understood about how these tools were being used by faculty in higher education. The purpose of this exploratory study was to examine levels of awareness and use of Web 2.0 applications by faculty in higher education in their teaching. The findings indicated that while faculty exhibited varied levels of awareness of Web 2.0 tools, their instructional integration is quite limited, particularly so in terms of embedded Web 2.0 tools in LMS systems. Email and discussion forum still comprised of the highest percentage of tool use. This paper used a participatory action research methodology and literature review exploring collaborative learning in online environments. In particular, the authors look at positive interdependence as best-case

cooperative learning framework and examined ways to construct it in formal blended and online learning courses they teach. The historical and theoretical foundations of education are explored as a further explanation for judging possible “good” learning development. Differences between online and face-to-face [F2F] learning affordances were discussed as well as implicating holes in the current research. Finally, a new theoretical approach was offered given the review of literature as well as the survey of various opinions on computer-supported collaborative learning [CSCL].

Hatten, J. et al. (2011). Transforming Collaboration into Cooperation: Fostering Positive Interdependence in Online Computer Supported Collaborative Learning Environments: The advancements of ICT had impacted significantly on educators to utilize the technologies in their classrooms (Sivapalan & Wan Fatimah, 2010). There was also significant move to make curriculum and content more authentic and relevant for student learning (Apple, 2008) and to allow students to become creative thinkers and problem solvers. However, there was more to utilizing information technology than merely uploading teaching materials online (Palloff & Pratt, 2001), and educators still lack the confidence in designing proper learning environments that engage and educate (Chung 2008). This paper presented a study conducted that incorporated Herrington and Kervin’s (2007) authentic learning strategies into a multimedia learning environment (MMLE) and reported on its impact on student learning. Positive results strongly supported authentic learning strategies as a means to innovate and engage students in technology-backed twenty first century classrooms.

Neo, M., et al. (2011). Content Restructuring with Authentic Learning Strategies in a Multimedia Learning Environment (MMLE): As K-12 students increasingly embraced social media, an investigation of teacher social media use was warranted. This pilot study examined teachers’ attitudes, behaviors, and opinions related to social media use. Teachers enrolled in a masters of education degree program were administered a four-part Teacher Social Media Use Survey. Findings revealed that teachers averaged over seventeen hours online each week, of which over eight hours were spent using social media. Teachers’ attitudes toward social media use were determined to be mostly positive. Of the six categories of social media examined, teachers used content communities, social networking sites, and online collaborative project applications the most. Teachers’ opinions related to the benefits and challenges of using social media for personal, academic (college classes), and professional (teaching) use were also explored, as well as how and to what extent teachers were using social media with their students.

Fewkes, A.M. et al. (2012). Facebook: Learning Tool or Distraction: The article will explore how a selected sample of secondary school students in Ontario had been using Facebook since it had become accessible to them and whether or not this use “supports the learning agenda” of classrooms as school boards had envisioned. The researchers collected both quantitative and

qualitative data from sixty three Ontario high school students via a questionnaire distributed through Facebook. Stating many examples of use for educational purposes, 73% of respondents reported having used Facebook for educational purposes. Of the students surveyed, only 27% said that at least one teacher had found ways to include Facebook in their lessons, and further, 77% of students believed that teachers do not support Facebook being unblocked. The results of this research point to a need for the better utilization of Facebook in classrooms and the need for school boards who choose to "embrace" the increasing popularity of social media to implement programs that better ensure teachers also feel comfortable enough to embrace this informal teaching tool.

Meishar-Tal, H., et al. (2012). Facebook groups as LMS: A case study: This paper described a pilot study in using Facebook as an alternative to a learning management system (LMS). The paper reviewed the current research on the use of Facebook in academia and analyzed the differences between a Facebook group and a regular LMS. The paper reported on a precedent-setting attempt to use a Facebook group as a course website, serving as a platform for delivering content and maintaining interactions among the students and between the students and the lecturer. The paper presented findings from the students' self-assessments and reflections on their experience. The students expressed satisfaction with learning in Facebook and willingness to continue using these groups in future courses.

Barczyk, C., et al. (2012). Does Social Media Enhance the Effectiveness of Graduate Business Education? -- A Small Classroom Study: Social networking media link people globally and hold immense potential for the enhancement of teaching and learning, especially in graduate business education. This paper defined social networking and provided a framework for understanding the six categories of social media. It also described how Facebook was integrated into a graduate business course taught at a regional campus of a Midwestern land grant university. Lastly, it summarized the results of a survey that designed to assess the effectiveness of Facebook usage in the course. The attitudes of seventeen students who participated in the business course that incorporated Facebook into its pedagogical design were measured. Overall, students were highly satisfied with the Facebook experience in their course. This attitude was rated highest, followed by positive, but slightly lower attitudes on Facebook's ability to foster connectedness, learning, and course convenience. Implications for the incorporation of social media into other courses were discussed.

Steinbrecher, T. et al. (2012). Examining Teachers' Personal and Professional Use of Facebook: Recommendations for teacher education programming: Members of the Net Generation were increasingly using social networking sites to interact with individuals both on and off campus.

In this study, we employed a quantitative approach with an exploration of descriptive data to examine Facebook site features pre-service educators use and how those features were utilized in personal and professional ways. Quantitative results indicated that interaction on Facebook was reciprocal. That was, the number of posts made to a wall was significantly related to the number of updates made by the profile owner. In addition, over 50% of profiles included pictures depicting heavy alcohol/binge drinking, 17% contained at least one sexually explicit photo, and 10% included pictures and names of K-12 students from practicum/internship assignments. Descriptive data indicated limited use of Facebook in professional ways. However, where professional interactions were noted, profile owners utilized peers for instructional ideas and ongoing classroom support. Recommendations for future research are described.

Datu, J., et al. (2012). Does Facebooking make us sad? Hunting relationship between Facebook use and depression among Filipino adolescents: The current paper looked at the linkage between the use of Facebook and depression levels of selected Filipino adolescents. Two hundred college students whose ages ranged from 17 to 20, in a private and sectarian collegiate institution were selected through purposive sampling. Goldberg Depression Scale (GDS) and a survey regarding the number of hours allotted in the use of Facebook per week served as data collection instruments. Utilizing a descriptive-correlational research design, the researchers found that there was no significant association between respondents' level of depression and the use of Facebook ( $r = 0.04$ ,  $p = 0.70$ ). Hence, depression cannot be sufficiently linked to the use of Facebook. Implications of the findings to the fields of counseling and psychology were discussed.

Sarsar, F. et al. (2012). Facebook as a Learning Environment (FOLE): Graduate Students' Perspectives: Facebook was a widely used online environment that had found its application in various fields of inquiry. A number of researches in the field of instructional technology have sought to understand the efficiency of Facebook in promoting such important concepts of learning as motivation, interaction, and relevancy and so on. This study surveyed thirty three graduate students majoring in different fields to understand their perspectives toward Facebook as an Online Learning Environment (FOLE). The data were qualitatively analyzed. In this study, researchers asked students why they use Facebook and how they feel about FOLE. Researchers also focused on understanding deeply what an online community means and how students feel about being a member of an online community. The results show that graduate students were ready to use FOLE. However, they have some concerns about it. Participants mentioned their expectations of FOLE's increased safety, learner orientation, easy to use, copyrighted and relevant.

Wu, S.Y., et al. (2012). The Influences of Social Self-Efficacy on Social Trust and Social Capital--A Case Study of Facebook: Facebook was currently the most popular social networking

service in the world. With such tremendous influence on community networks, Facebook had been attracting considerable attention both from the media and academia. A review of the literature indicated that most researchers were concerned primarily with the influence of personal traits on online interactive behavior. This study began from the premise that self-efficacy, the confidence of individuals to function in an online-community, was a key element influencing participation in online social networks. This study attempted to establish a model of the social traits of Facebook users, and our results indicated that social self-efficacy had a positive influence on social trust; social trust had a positive influence on social capital, and social trust mediated the relationship between social self-efficacy and social capital.

Hsieh, K. (2012). Learning Visual Art through Social Networking Application: The number of online social networking application user increased during the last five years. Facebook, one of the most popular social networking applications had become part of people's daily lives. As an art educator, what could we do to properly utilize this free online application in our school while most of the students communicated to each other through Facebook? What were the benefits and challenges for art teacher to use Facebook in the classroom for teaching and learning about art? Researchers used Facebook as one of instructional technology tools to teach university students learning about art, both with undergraduate and graduate students. And discussed several means of how could art teachers use Facebook to assist their teaching in the schools. In the end, he discussed the limitations and solutions for art educators. The copyright issues of posting images and movies are also discussed.

Kilinc, E., et al. (2012). Aligning Facebook and Twitter with Social Studies Curriculum: The objectives of this presentation covered the importance of science, technology, and society within the social studies classroom. By using social network tools, students would be refining their critical thinking skills and prompting social inquiry. This poster presentation would highlight how social networking tools were aligned with social studies curriculum (e.g. Facebook, twitter). The poster would include examples of lessons that teachers could use in the classroom as well as connections to national and state social studies standards. These social mediums fostered global citizenship by encouraging communication through cross-cultural dialogues.

Cam, E. et al. (2012). A New Addiction for Teacher Candidates: Social Networks: With the transition to being a knowledge-based society, the internet usage had become an irreplaceable part of life. As social networks had come into our lives, the internet usage had taken a different dimension. People could affiliate to social networks in order to make friends, exchange information, find partners, and to play games. The process that started with membership then turned into an addiction. The internet addiction was along with the addiction to social networks,

which was one of the today's matters. The study used quantitative model. Facebook Addiction Scale was used to collect data and t-Test and ANOVA analyzed were used to determine whether there was a difference between gender and classes according to the Facebook addiction. The findings of this study revealed that there was a significant difference between gender and classes according to the Facebook addiction. It was found that Facebook addiction levels of males were higher than those of females. Besides, it was found that Facebook addiction levels of seniors were higher than those juniors, sophomores and freshmen.

Zhang, X. (2012). *Can You Hear Me Now? Design Socially Enhanced Classroom Blogs for Promoting Student Learning: As today's students became the savvy users of social sites like Facebook and Twitter, educators were taking this opportunity to motivate learning and foster engagement through the use of Web 2.0 software such as classroom blogs. This study examined why social learning matters in higher education, and how could technology. The study demonstrated how to design and implement a socially enhanced classroom blog for higher education through a case study. The future study plans to evaluate the relationship between the use of social enhancements and student learning in terms of learning, social presence, satisfaction and community of practice.*

Yamauchi, Y., et al. (2012). *Impact of Using Facebook as a Social Learning Platform to Connect High School Students with Working Adults: This study examined "the Sole study program" to build a social learning community for high school students using Facebook and other Internet services. In the two-week program, the students worked on individual study projects that focused on their future plans. With the help of volunteer supporters and facilitators, the students found relevant information and received constructive feedback about their progress. We investigated how the program was accepted by the students and how it affected their views on the future using pre and post-survey data. The results indicated that the students (a) viewed their own future more positively, (b) realized that learning about unknown subjects could be interesting, and (c) discovered that advice from their superiors was useful. Responses from the volunteer supporters showed that the program also worked as a reflective learning opportunity for them. Moreover, they identified several issues through the program to address for the success of this approach.*

Reed, A. (2012). *Facebook: The Multimedia Element: This paper was intended to gauge student response to using Facebook as a multimedia teaching element and classroom management system. The discourse between the students and the instructor would be examined via gathering quantitative and qualitative data from the students both within the Facebook element and within online survey tools that would illuminate student response compared to student response when only face to face instruction is used or face to face and the Blackboard learning system.*

Smala, S. (2012). Using Facebook to Engage Students with Social Justice Concepts in Teacher Education: This paper presented a work-in-progress that described and analyses how a Facebook page for a large introductory education class could re-focus attention and engage students with new social justice concepts through active learning strategies utilizing interactive Facebook tools. A Facebook page was purposefully created and offered to two hundred thirty one teacher education students in an introductory education course in 2011 and used as the access point for latest information, e.g. web newspaper articles, current affairs, TV programs, comedy shows and other media, that involved social justice in education topics. Links to 'just out' texts were uploaded several times each week during semester which led to an immediacy of different sources and discoursed in support of the courses' focus on social justice in education issues.

Witt Boriack, A., et al. (2012). Examining the Use of Social Networking in a Teacher Education Program: The study examined the use of social networking, specifically the use of a Facebook group, in a teacher education program at a public, four-year university. Results indicated that students used social networking to share resources, encourage each other, and ask questions about program logistics. Based on findings from the current study, it appeared that social networking might be a valuable resource for teacher education programs—particularly for programs that enroll students who live in a variety of geographical locations.

Tung, P.Y. et al. (2012). Social Media and Privacy: Comparing U.S. and Japanese College Students' Use of Facebook and Twitter: Multicultural comparisons of online blogging showed that users from most countries fall into similar patterns of use. One notable exception was Japanese bloggers' strong tendency to conceal their identity (Su, Wang, Mark, Aiyelokun, Nakano, 2005). The authors wondered if this tendency continued with social networking services (SNS). The current pilot study gave paper-based questionnaires to 51 Japanese and 11 American university students. The findings contradict the blogging studies and revealed a more complex balance of privacy and openness by Japanese SNS users. Not only were these Japanese young people more open in their identification on SNS than were bloggers in past studies, they were often more open than the small sample of American students. The small samples use in this paper will be expanded in future studies to test these preliminary results.

Bastiaens, T.J. et al. (2012). Education and Information Technology 2012: A Selection of AACE Award Papers: This book included 31 award winning papers from AACE's conferences. This year's selection included papers from the annual conference of the Society for Information Technology & Teacher Education (SITE) in Nashville (TN), the Global Learn Asia Pacific conference in Melbourne (Australia), the World Conference on Educational Multimedia, Hypermedia and Telecommunications (Ed-Media) in Lisbon (Portugal) and the World Conference on E-Learning in

Corporate, Government, Healthcare, and Higher Education (E-Learn) in Honolulu (HI). The decision to nominate a conference paper for an award was made by peer reviewers. All authors were honored during the conference and received a certificate that serves as testimony to their outstanding research and contribution to the conference.

Hilbert, J., et al. (2012). Do not take as an example? Dysfunctional use of new media in educational settings: This paper was a report on the findings of a small-scale preliminary study based on blog entries and commented written by German teachers. The two blogs used in this work were analyzed based on the question whether there was evidence of a didactically questionable use of new media. Our work in progress aimed at discovering the payoffs teachers and their students might get from such behavior.

Zhang, Y. (2012). College Students' Uses and Perceptions of Social Networking Sites for Health and Wellness Information: This study explored college students' use of social networking sites for health and wellness information and their perceptions of this use. Thirty-eight college students were interviewed. The interview transcripts were analyzed using the qualitative content analysis method. Those who had experience using social networking sites for health information used the platform mainly to check health updates of a loved one find lifestyle information and asked about treatments for mild conditions. Overall, participants were skeptical about the quality of information, concerned about the lack of medical knowledge of their friends or peers and wary about possible social risks and invasion of privacy. Based on the resulted, a model of users' acceptance of social networking sites for health and wellness information was proposed and implications for designing social platforms to better support health inquiries were discussed. Using social networking sites for health and wellness information was not a popular behavior among college students in this study and social networking sites seem not to be a well-perceived platform for health and wellness information.

Tharayil, S. et al. (2012). High School Students' Perceived Effect of Facebook Use While Completing Homework: With over 70% of adolescents using social networks and the tendency for students to multitask, this paper reports on a study investigating high school students' perceptions of the effect of simultaneously using Facebook and doing homework. Prior research showed that multitasking affected one's memory and that cyber-slacking often had a negative influence on students' academic performance. This study queried students in a Southern California high school about their perceptions of the use of Facebook while working on homework. The results indicated that Facebook use while doing homework was common practice for the participating sample and that a majority did perceive it as affecting their assignment completion time. Most participants



indicated that the practice reduced the quality of their work at least slightly. Others believed that the use of Facebook while completing assignments improved their work a little.

Veira, A. (2012). Learning outside the walls of the classroom: engaging the digital natives: The use of Information and Communications Technology (ICT) is invading our society's classrooms and homes. This paper examines the technological innovation at a Secondary School in St. Vincent and the Grenadines initiated by a Biology teacher through the use of ICT outside of the classroom. The innovation was decided on after careful observation of the devices students bring to school, the teacher's personal interest in technology and the government's introduction of ICT in education. The use of an online web portal (website), blogging, social networking and online groups with students and teachers were the resources investigated to determine student interest and motivation towards the subjects: Biology, Information Technology and Visual Art. The use of technology by the students and teachers in the subject areas and how the use affects student enthusiasm is monitored and will be reported in this paper.

Atabek, O. (2012). Preservice Teachers' Personality, Motives, Motivation, and Attitudes Associated with the Use of Social Network Services: Facebook Case: The paper reports the findings from the quantitative part of an ongoing research study on Turkish pre-service teachers who use Facebook (FB). Social network services are increasing in popularity and certain social network services are already being used for educational purposes. Social network services simulate and may even emulate existing social networks on an abstract level and reflect them in the electronic world. The social structures that they rely on are already being studied in regard to the context of learning and education. But the electronic simulations or reflections of existing social structures need further explorations. To investigate the personality, motivation, motives, and attitude factors that influence FB use, 641 preservice teachers who were students of Middle East Technical University (METU) in Turkey were surveyed. Four regression analyses were used to describe the results of the collected data.

Hakkarainen, P. et al. (2012). "They just wanna know your business": Education students' representations of online communities: This paper analyzes how education students represent the Internet and online communities. The site of this research is an undergraduate course entitled Digital Technologies and Applications for Teachers co-taught by the authors. In the course, digital storytelling is used, first, as a tool for education students to reflect on their relationship with the Internet. Second, digital storytelling is used as a research instrument to gain insight into education students' understanding of the Internet. Other research data include audio recordings of class sessions and individual interviews with the students.

Goulart, E. et al. (2012). Facebook as an Organizational Communication Tool: a Brazilian study: This paper studies organizational communication in corporate profiles on Facebook. Analyze relationships between companies and stakeholders. Exploratory in nature, is a documentary research and content analysis of the text messages. The corpus was based on the Top of Mind in 2010, conducted by Datafolha (Brazilian institute) and selected three companies (Nike, Skol and Gol), which the highest number of accesses. To select the posts, two 'weeks' were artificially created from January to June of 2011. A new type of content, not fitted in traditional concepts of Organizational Communication, was found and called "relational content". This research aims to contribute with organizational communication studies in virtual media. The results showed institutional and marketing intent predominate on Facebook. However, a representative portion of the messages showed the intention to establish conversations with users for being accepted in social groups articulated in the virtual networks.

Ebner, M., et al. (2012). Have They Changed? Five Years of Survey on Academic Net-Generation: At Graz University of Technology (TU Graz) a questionnaire amongst freshmen is carried out each year since 2007. Aim of this poll is to check IT and Web 2.0 competences and skills of the new students coming to TU Graz in order to adapt the e-learning services for their study at TU Graz. Furthermore, the results mirror current trends and changing behaviors of young people said to be the net-generation often postulated to which we and our teachers will face to. After five years of investigations time has come to take a look back and reel up processes and progresses not only because five years match the standard duration of a study at TU Graz. Which trends have been established, which assumptions did not arrive, what happened totally unexpected? This paper targets the main changes within the last five years due to this subject. It compares the five study years and outlines the current study results of 2011 in. One of the main results over five years is that the net-generation did arrive but slowly adapt their study life to what they are already used to do in private.

Weeney, P. (2012). Sharing a Facebook Avatar Constructively in the Classroom: Students created a Facebook avatar to represent their class in an effort to determine the effects of social networking on personal identity and privacy. By using the avatar, students could "voice" any idea anonymously and watch for responses from the avatar's "friends." Course was designed to teach students potential threats to personal identity and privacy.

Spacetti, E. (2012). Social network and peer education: an experience in a road safety education project: This paper presents a road safety education project realized in the area of Bologna (Italy) with a network of different educational agencies (schools, University, health system, Province Authority of Bologna). In the last 4 years, students from upper secondary schools were

trained about several road safety contents using peer education and a social network, Facebook. In particular, Facebook was used as tool of communication, documentation and discussion for those young students, giving them space to creativity and production of multimedia contents in a more informal way. The experience developed in these years showed that the environment created by this project was more effective than traditional ones and reached a large number of students creating a bridge between formal and informal learning.

Hew, K.F. et al. (2012). Use of Facebook: A Case Study of Singapore Students' Experience: Facebook has become one of the most popular social network sites among many students. However, current research on Facebook use has focused mainly on Anglo-American students. Relatively little is known about Facebook use in Singapore. Data were collected from 83 students (ages ranged from 15 to 23). This study uses a naturalistic case study wherein the students' decision to use Facebook is a personal decision and on a voluntarily basis; their participation is not a required or graded component. The specific objectives of the study are first, to examine Singapore students' motives for using Facebook; second, to investigate the types of friends they communicated with on Facebook; and third, to examine how students manage their privacy on the social networking site. Findings suggested that the current sample of Singapore students used Facebook primarily for non-educational purposes. Specifically, Facebook was used to maintain relationships with existing known friends such as former or current schoolmates. Respondents also reported using Facebook for entertainment purposes and to vent their emotions. No respondent reported using Facebook for educational purposes. The most common strategy for privacy protection utilized by the respondents was to decrease profile information visibility through restricting access to only known friends. Educational implications of the findings as well as suggestions for future research are provided.

Thompson, S.H. et al. (2012). Frazzled by Facebook? An Exploratory Study of Gender Differences in Social Network Communication among Undergraduate Men and Women: Although a majority of young adults are members of at least one social networking site, peer reviewed research examining gender differences in social networking communication is sparse. This study examined gender differences in social networking, particularly for Facebook use, among undergraduates. A survey was distributed to 268 college students who were primarily freshmen (76%), female (53.3%), Caucasian (76.5%) with a mean age of 19.10 years (SD = 2.4). Minutes they reported daily on the internet, social networking, and Facebook were 217.2 (SD = 198.36), 117.2, (SD = 131.7), and 106.8 (SD = 120.3), respectively. Most (94%) had Facebook accounts. For Facebook users, gender differences were examined and females were more likely than males to report spending more time on Facebook than intended ( $p$  less than 0.0001); often losing sleep

because of Facebook ( $p$  less than 0.0001); feeling closer to Facebook friends than those seen daily ( $p$  less than 0.0001); that Facebook pictures cause negative self-body image ( $p$  less than 0.05); that Facebook use sometimes causes stress ( $p$  less than 0.05), and sometimes feeling addicted to Facebook ( $p$  less than 0.001). This research is important to better understand effect of social networking use on emotional health and to learn ways to help young adults deal with stressors that may accompany social networking use.

Woodley, C. et al. (2012). Supporting Student Transition through Social Media: Views about the role of Facebook and other social networking sites in education are extremely varied. Facebook threatens academic success and yet "certain kinds of Facebook use" can support study; indeed, Facebooking students may perform better than their unwired peers (Ellison, Steinfield, and Lampe 2007). Facebook is emphatically a social network site but trends using it for teaching are increasing. Given increasing numbers of students "on" Facebook, the temptations for universities to enter that space is strong. Paradoxically, as some studies blame the social networking phenomenon for increasing failure rates at universities, universities are simultaneously exploring ways to engage students via that medium. Victoria University (VU) in Melbourne uses Facebook to engage students. This article examines the Faculty of Business and Law's Facebook site at VU and offers a general analysis of Facebook usage and some student perspectives on the faculty site. The discussion explores Facebook as an interactive point of engagement to support student transition to the university, yet it questions the ethics of using Facebook and recommends that it be used only as an additional point of engagement.

Lou, L.L., et al (2012). An Examination of the Reciprocal Relationship of Loneliness and Facebook Use among First-Year College Students: College students are using social network sites such as Facebook to communicate with their families and friends. However, empirical evidence is needed to examine whether there exists a reciprocal relationship between students' use of social network sites and their psychological well-being. The present study focused on two reciprocally-related research questions: (a) is there an impact of loneliness on Facebook intensity and motive for using Facebook among first-year college students? (b) Is there an impact of Facebook intensity and motive for using Facebook on loneliness? Data were collected from a sample of 340 first-year college students and were analyzed through structural equation modeling. No reciprocal relationship was found in the study: Facebook intensity had a positive impact on loneliness and, motive for using Facebook did not have any impact on loneliness, whereas loneliness influenced neither Facebook intensity nor motive for using Facebook.

Junco, R. (2012). The Relationship between Frequency of Facebook Use, Participation in Facebook Activities, and Student Engagement: Educators and others are interested in the effects of

social media on college students, with a specific focus on the most popular social media website-- Facebook. Two previous studies have examined the relationship between Facebook use and student engagement, a construct related to positive college outcomes. However, these studies were limited by their evaluation of Facebook usage and how they measured engagement. This paper fills a gap in the literature by using a large sample (N = 2368) of college students to examine the relationship between frequency of Facebook use, participation in Facebook activities, and student engagement. Student engagement was measured in three ways: a 19-item scale based on the National Survey of Student Engagement, time spent preparing for class, and time spent in co-curricular activities. Results indicate that Facebook use was significantly negatively predictive of engagement scale score and positively predictive of time spent in co-curricular activities. Additionally, some Facebook activities were positively predictive of the dependent variables, while others were negatively predictive.

Manago, A.M., et al. (2012). Me and My 400 Friends: The Anatomy of College Students' Facebook Networks, Their Communication Patterns, and Well-Being: Is there a trade-off between having large networks of social connections on social networking sites such as Facebook and the development of intimacy and social support among today's generation of emerging adults? To understand the socialization context of Facebook during the transition to adulthood, an online survey was distributed to college students at a large urban university; participants answered questions about their relationships by systematically sampling their Facebook contacts while viewing their Facebook profiles online. Results confirmed that Facebook facilitates expansive social networks that grow disproportionately through distant kinds of relationship (acquaintances and activity connections), while also expanding the number of close relationships and stranger relationships, albeit at slower rates. Those with larger networks estimated that larger numbers of contacts in their networks were observing their status updates, a form of public communication to one's entire contact list. The major function of status updates was emotional disclosure, the key feature of intimacy. This finding indicates the transformation of the nature of intimacy in the environment of a social network site. In addition, larger networks and larger estimated audiences predicted higher levels of life satisfaction and perceived social support on Facebook. These findings emphasize the psychological importance of audience in the Facebook environment. Findings also suggest that social networking sites help youth to satisfy enduring human psychosocial needs for permanent relations in a geographically mobile world--college students with higher proportions of maintained contacts from the past (primarily high school friends) perceived Facebook as a more useful tool for procuring social support.

Maguth, B. et al. (2012). Using Social Networking in the Social Studies for Global Citizenship: A Case Study of Japan's 3:11 Quake: Within a decade, the world has experienced more than three devastating earthquakes in Sumatra, Haiti, and Japan. During these natural disasters, citizens from all around the world turned to 21st Century communication technologies to learn about and support the victims of these events. This paper discusses the potential for social studies teachers and students in using social networks to learn about global issues. To highlight this point the authors discuss the educational potential of social networks in learning about the 2011 earthquake in northern Japan. This integration of social networks allows students to: 1. Use social media as a research tool to critically analyze different primary and secondary sources. 2. Tap into discussions and resources provided by global networks, communities, and organizations. And, 3. Use social networks to rally support and donations to help the victims. The authors reflect on this use of social networking in the studies classroom, and the potential opportunities and challenges in using it to foster global citizenship.

Govender, I. et al. (2012). Using Social Networks for Teaching and Learning: An Exploratory study: The aim of this study was to investigate the students' and lecturers' awareness, and perceptions towards the use of online social networking sites for teaching and learning. The social network sites that were of interest were Facebook, Ning, YouTube and Twitter. A census method was followed. Questionnaires were used to gather data regarding their perceptions of social network sites. Results showed that most students were Facebook users and that they perceived academic benefits by participating in these sites. Furthermore, results showed a strong correlation between students that perceived online social networking sites as helping them with their studies and those that perceived social networking sites as a stimulant to their desire to learn. However, there were some concerns by instructors regarding loss of control of teaching.

Lam, L. (2012). An Innovative Research on the Usage of Facebook in the Higher Education Context of Hong Kong: Teaching and learning is undergoing a dramatic change due to the advancement in telecommunication and IT. Increasingly, online learning platform is playing an important role higher education. The maturity of Internet and emergence of various cloud services catalyze the development of these platforms and student learning behavior. An example is Facebook, online social network sites, which changes the interaction, communication and interrelation of students and their daily life. There is a growing trend that people participate in Facebook. Given there is discussion forum provided by online learning platforms, students get used to communicate on Facebook. The phenomenon enables teachers to think whether Facebook can be incorporated in teaching to facilitate student learning. Past research on online social network sites evidence that there are a number of benefits including the improved student participation,

social relationship, interaction, communication and facilitation. However, seldom studies try to consolidate these benefits and examine simultaneously against the overall learning motivation. This study attempts to develop a model of student motivation in learning with four Facebook benefits: (1) Interaction, (2) Communication, (3) Social relationship, (4) Participation. The students of the School of Continuing and Professional Studies (SCS), The Chinese University of Hong Kong (CUHK), studying Hi-Diploma Programme, are invited to participate in this study. A survey was conducted to examine how these Facebook benefits relate to student motivation in learning. The results revealed that Interrelationship, Communication, Social relationship, and Participation influence significantly on student learning motivation. The results show teachers how Facebook benefits improve student learning motivation. The study also tries to explore some demographic trend in related to student Facebook usage.

Bartholomew, M.K., (2012). New Parents' Facebook Use at the Transition to Parenthood: New parents' Facebook use was examined from a social capital perspective. Surveys regarding Facebook use and parenting satisfaction, parenting self-efficacy, and parenting stress were completed by 154 mothers and 150 fathers as part of a larger study of dual-earner, Midwestern U.S. couples making the transition to parenthood. Results indicated that mothers used Facebook more than fathers did, and that mothers perceived an increase in use over the transition. When more of mothers' Facebook friends were family members or relatives, and when fathers reported connecting with more of their Facebook friends outside of Facebook, they reported better parental adjustment. For mothers, however, more frequent visits to Facebook accounts and more frequent content management were each associated with higher levels of parenting stress.

Chen, B. et al. (2012). Investigating instructional strategies for using social media in formal and informal learning: Despite the high popularity of personal use of online social media, a low percentage of students and instructors use them for educational purposes. This qualitative study explores the use of social media among faculty in the discipline of public administration in the United States. Eight instructors participated in telephone interviews about their experiences and perceptions of using social media for teaching and learning. Instructors perceive that informal learning using social media could be facilitated by instructors and integrated into formal learning environments for enriched discussions, increased engagement, and broad connections. This study provides qualitative empirical support for social learning theories while offering strategies for and examples of how social media can be used to connect formal and informal learning.

Sezen Balcikanli, G. (2012). Social Networking in Physical Education: Undergraduate Students' Views on Ning: It was the aim of this study to investigate physical education undergraduate students' views on the use of social networking, one of the most typical

representations of Web 2.0 technologies. In order to do so, the researcher, who was the instructor of the class, entitled "Fair Play Education in Sport", introduced Ning and its educational aspects to her students with a 50-minute presentation prior to the study. Following this, the students were encouraged to use this networking for 15 weeks in parallel with their class. During this application, the researcher helped the students to make the best use of Ning in educational settings. Upon the implementation, the researcher interviewed the students (n=19) in five groups on the basis of the questions prepared and piloted earlier. The interviews demonstrated that the students enjoyed using social networking in educational settings. The findings of the study were the following: Increasing student-student and teacher-student interaction, enhancing student motivation and classroom climate, sharing materials with the instructor and students, making use of students' interests and needs, and making learning process more interesting and permanent. The research concluded that social networking could be used in PE classes effectively.

Wang, C.M. (2012). Using Facebook for Cross-Cultural Collaboration: The Experience of Students from Taiwan: The purpose of this study is to investigate the use of Facebook among college students in a cross-cultural collaboration project between Taiwan and the United States, and focuses specifically on Taiwanese students' perceptions. Questions explored are: (1) Is Facebook a feasible platform for cross-cultural collaboration? (2) How does this experience in return affect students' social life on Facebook? (3) What promotes a successful cross-cultural collaboration on Facebook? The study examined students' reflection essays, and conducted a survey two months after this collaboration to evaluate the impact. The results indicate that Facebook is a feasible platform for educational purposes, and can be improved by integrating other Web 2.0 applications. However, it requires individual efforts to maintain the friendship after the project ended. In conclusion, Facebook is a feasible platform, but to create a successful cross-cultural collaboration, instructors also need to take individual learning motivation and instructional design into consideration.

Gashim, I., et al. (2012). Saudi Students' Perceptions of Social Networking (Facebook) Being Used in Online Instruction: Establishing a learning community with a high sense of social presence is an important element of online learning. Social networking platforms integrated within asynchronous instruction are an innovative approach to building online learning. This study-in-progress has chosen to examine Facebook as the social networking platform because it has become a common and popular form of social interaction. Therefore, in order to determine the quality of Facebook as a good supplement for online instruction, the purpose of this study is to investigate online students' perceptions of Facebook as a preferred tool for asynchronous instruction regarding sense of community & social presence. The target audience of this study will be Saudi



university students. This study would involve examinations of relationships among these perceptions and demographic variables like age, gender, computer proficiency, discipline, GPA, frequency of using social networking, and educational level.

Jeremic, Z., et al. (2012). Using Online Presence to Improve Online Collaborative Learning: Social software tools have become an integral part of students' personal lives and their primary communication medium. Likewise, these tools are increasingly entering the enterprise world (within the recent trend known as Enterprise 2.0) and becoming a part of everyday work routines. Aiming to keep the pace with the job requirements and to position learning as an integral part of students' life, the field of education is challenged to embrace social software. Personal Learning Environments (PLEs) emerged as a concept that makes use of social software to facilitate collaboration, knowledge sharing, group formation around common interests, active participation and reflective thinking in online learning settings. Furthermore, social software allows for establishing and maintaining one's presence in the online world. By being aware of a student's online presence, a PLE is better able to personalize the learning settings, e.g., through recommendation of content to use or people to collaborate with. Aiming to explore the potentials of online presence for the provision of recommendations in PLEs, in the scope of the OP4L project, we have developed a software solution that is based on a synergy of Semantic Web technologies, online presence and socially-oriented learning theories. In this paper we present the current results of this research work.

Fujita, N. et al. (2012). Exploring Online Formative Assessment Using Repertory Grid Technique via Facebook: Technology-enhanced formative assessment offers students and teachers' timely feedback on learning and teaching processes in a format that supports pedagogical decision making. In this exploratory study of using the repertory grid technique as a formative assessment technique, we describe an innovative environment for e-learning and instruction that makes use of an existing social media infrastructure (in this case Facebook). We have embedded a concurrent assessment technique in that environment that provides feedback to students and instructors in a timely manner. We suggest some qualitative (e.g. degree of overlap with an "expert" repertory grid) and quantitative (e.g. diversity of scores) features of the repertory grids that may be useful for formative assessment.

Fewkes, A.M. et al. (2012). Facebook: Learning Tool or Distraction: The article will explore how a selected sample of secondary school students in Ontario have been using Facebook since it has become accessible to them and whether or not this use "supports the learning agenda" of classrooms as school boards have envisioned. The researchers collected both quantitative and qualitative data from 63 Ontario high school students via a questionnaire distributed through

Facebook. Stating many examples of use for educational purposes, 73% of respondents reported having used Facebook for educational purposes. Of the students surveyed, only 27% said that at least one teacher had found ways to include Facebook in their lessons, and further, 77% of students believed that teachers do not support Facebook being unblocked. The results of this research point to a need for the better utilization of Facebook in classrooms and the need for school boards who choose to "embrace" the increasing popularity of social media to implement programs that better ensure teachers also feel comfortable enough to embrace this informal teaching tool.

Nam, K.A. et al. (2012). Re-Imagining Internet Scholarship: Academic Uses and Abuses of the Influential Internet Social Network, Facebook: Since its inception at Harvard in 2004, the social network, Facebook, has grown dramatically and spread across the globe. It will soon have 1 billion users and is now operative in over 75 languages. A large percentage of undergraduates are now active on Facebook. Much of the recent literature on Facebook focuses on business applications and how it can contribute to growing profits and market share. Little attention has been directed to the academic implications of Facebook. The focus of this article is to assess critically the scholarly uses and abuses of Facebook. The article draws on several theoretical frameworks such as those of Ivan Illich (conviviality of technologies), Denis Goulet (technology as a two-edged sword), and Mihaly Csikszentmihalyi (optimal human experience and flow). Many scholarly uses of Facebook are presented documenting its potential for enhancing academic work. That is followed by a discussion of negative aspects of the technology and potential adverse effects on humans in terms of their productivity and capabilities. If used critically and creatively, these new networks can enhance in valuable ways human, intellectual, social, and cultural capital. In a networked knowledge society, students now have extraordinary new tools to help them realize their intellectual, cultural, and social potential.

Semich, G. (2012). Let's Face it: Social Networking Is Here To Stay, So Let's Embrace It: In a consistently evolving digital world, today's students are becoming increasingly more fixated on the Internet, social networking, outlets, and personal technology devices such as iPhones, iPads, Blackberrys, and the like. As educators strive to further develop their lessons and promote active involvement amongst students in the classroom, it is imperative that they address ways in which the divide between education and technology can dissipate. In years past, instruction absent of technology proved effective for many instructors, but as society continues to rapidly adopt varying forms of technology, educators must accept these changes and begin to embrace them within the curriculum. Applications such as social networking sites and discussion boards can be implemented within today's English classrooms to enhance learning and engage students via mediums that

currently attract them. Not only will students become more actively involved in class, but also they should become more independent, enriched learners.

Barden, O. (2012). "...If We Were Cavemen We'd Be Fine": Facebook as a Catalyst for Critical Literacy Learning by Dyslexic Sixth-Form Students: This article is derived from a study of the use of Facebook as an educational resource by five dyslexic students at a sixth form college in north-west England. Through a project in which teacher-researcher and student-participants co-constructed a group Facebook page about the students' scaffolded research into dyslexia, the study examined the educational affordances of a digitally mediated social network. An innovative, flexible, experiential methodology combining action research and case study with an ethnographic approach was devised. This enabled the use of multiple mixed methods, capturing much of the rich complexity of the students' online and offline interactions with each other and with digital media as they contributed to the group and co-constructed their group Facebook page. Social perspectives on dyslexia and multiliteracies were used to help interpret the students' engagement with the social network and thereby deduce its educational potential. The research concludes that as a digitally mediated social network, Facebook engages the students in active, critical learning about and through literacies in a rich and complex semiotic domain. Offline dialogue plays a crucial role. This learning is reciprocally shaped by the students' developing identities as both dyslexic students and able learners. The findings suggest that social media can have advantageous applications for literacy learning in the classroom. In prompting learning yet remaining unchanged by it, Facebook can be likened to a catalyst. This work investigates the promise of Facebook and blogs for enhancing students' levels of engagement in learning. This issue warrants investigation because there is little published empirical work on the subject. The researchers applied a learning ecology perspective to study the potential of Facebook and blogs in enhancing student levels of engagement in learning. In-depth interviews with lecturers who use Facebook and blogs and focus groups with their respective students were carried out to establish: usage in teaching and learning; the context of use; challenges encountered in usage; and whether these technologies enhanced student learning. A significant finding of the study was that appropriate use of blogs and Facebook groups, if accepted by students as a learning tool, enhances students' engagement in learning activities of an academic nature on- and off-campus. The article also suggests strategies for the implementation of Facebook and blogs in ways that are likely to have a positive impact on student levels of engagement.

Locatelli, S.M., et al. (2012). Facebook Use and the Tendency to Ruminare among College Students: Testing Mediation Hypotheses: Studies have found that general use of Facebook influences subjective well-being. However, fewer studies have explored the impact of

specific use behaviors, such as information posted in status updates. The current study uses data collected from 251 Facebook-using undergraduate students through an online survey, and examines the valence and frequency of Facebook status updates as predictors of three measures of subjective well-being: life satisfaction, physical health, and depression. Valence and frequency of status updates strongly predict the tendency to ruminate, and rumination mediates the effects of positive and negative status update frequency on subjective well-being. Results support the conclusion that rumination mediates the impact of Facebook status updates on subjective well-being more strongly than Facebook status updates mediate the impact of rumination on subjective well-being. (Contains 2 tables and 1 figure.)

Mitchell, K. (2012). *A Social Tool: Why and How ESOL Students Use Facebook*: English language learners in the United States and abroad have begun to utilize Facebook, a social networking site, which since its inception in 2004 has been extremely popular with American college students. This qualitative case study with participants from an intensive English program in the US explores seven ESOL students' motivations for joining Facebook and use of the site and two ESOL students' reasons for not joining it. This study follows the individual cases and looks across cases to find trends in motivation, use, and difficulties. The ESOL students in this study joined Facebook for social reasons. Their use over a four-week period and interview data showed that they were able to communicate with existing friends, learn English, and learn about American culture through Facebook. They were able to accomplish their goals on Facebook with few difficulties. This paper is a review of literature on Web 2.0 uses in higher education from 2007-2009. The goals of this review were (1) to identify what Web 2.0 technologies were used in college level instruction, and (2) to examine any research evidence that Web 2.0 technologies could enhance teaching and learning. Conference proceedings from 2007 to 2009 were reviewed from four major international conferences in instructional technology: eLearn, EdMedia, SITE, and AECT. The review showed that five Web 2.0 technologies were most commonly discussed in the current literature: blogs, wikis, podcasts, social networks, and virtual environments. The findings of how each of these Web 2.0 technologies was used in higher education along with any research evidence were discussed.

Suwannatthachote, P. (2012). *Exploring Pre-service Teachers' Awareness on Using Social Networking Sites: Are they ready for digital citizenship*: Undergraduate students have been widely-adopted Social Networking Sites (SNSs) such as Facebook. Some issues were discussed among users concerning the users' netiquette. For users like pre-service teachers who may or may not use SNSs for their communication tools in near future, however, there is a need for teacher education institutes to prepare their digital citizenship. This study examined three hundred and seventy seven

pre-service teachers of the awareness of SNSs communication behaviors. Quantitative data indicated that the number of network friends was the most significant factors effects to SNSs communication behaviors and awareness. Qualitative data from the open-ended question revealed the need to revise the ED-TECH course for pre-service teachers to have more deep understanding on digital citizenship.

Roy, N. et al. (2012). Pan-Quebec Survey of the Practices, Competencies, Attitudes, Benefits and Challenges Inherent in the Use of ICTs by 25,561 Post-Secondary Students: The study's objectives are to determine practices, competencies, attitudes, benefits and challenges inherent in the use of ICTs. There are computers in nearly every Canadian household and school. Moreover, one-third of Internet-connected households used handheld wireless devices to access the Internet at home (Statistic Canada, 2010). Educational administrations, however, lack recent and well-documented student technology usage portraits, such as those produced by US organizations like PEW Internet and ECAR (Smith & Caruso, 2010; Zickuhr & Smith, 2012). To create such a portrait, we surveyed 25,507 college students (mostly 16-20 years old) in the province of Quebec. Our results showed that ICTs are more present than anticipated: 76% of students have laptops, 86% have cell-phones and 55% have home computers. Our findings show a wide range of ICT-related results. The conclusions highlight the students' positive perception of ICT in education and the importance of computer presence in their lives.

Greenwood, G. (2012). Examining the Presence of Social Media on University Web Sites: Over the past few years, social networking has exploded into a massive medium that has captured the attention of a large portion of the American population. The ever-growing social networking site(s) (SNS) movement has filled a networking gap and thus, has presented higher education institutions with unique opportunities (Reid 2009) to further connect with a target market that is familiar with and frequently using social media. With such a widely-used and relatively cheap medium on the rise, universities have begun to harness SNS to bolster recruiting and marketing efforts. This study records and analyzes these efforts, documenting which universities are using SNS and how.

Conceição, S. et al. (2012). Building and Sustaining an Online Teacher Education Community: A Case Study for Overcoming Barriers: This paper describes a yearlong evaluation of an online program for teacher education in early childhood. Results show that building and sustaining a professional learning community online requires intentional design; common interests, goals, and practices; interactions supported and mediated by enabling technologies; and, most importantly, individuals who have the motivation to be committed, dedicated, and engaged in the sharing of information and social support to create a sense of community.

Vanbuskirk, S. (2012). Examining Teacher-Initiated and Student-Initiated Applications of Communication Technology to Facilitate Scientific Literacy for Secondary School Students: This paper examines four case studies of innovative teachers who integrate communication technology in their secondary science classes. Communication technology can provide multiple benefits towards the goal of facilitating scientific literacy. This study began by deconstructing the concept of scientific literacy into four process-oriented pedagogic elements (Communication, Collaboration, Critical Thinking, and Connection) and then compared how the technology activities fostered achievement in each of these four areas. Combining the descriptions of both the learning activity and its subsequent learning outcomes can help can help teachers integrate such opportunities into their teaching repertoire with explicit goals in mind.

Aldaej, A., et al. (2012). E-Learning evolution: Next Steps Semantic web and foundations of E-learning: In the past decade or so, the Internet has dramatically changed the face of education, as it is now a significant source of material for many students and teachers. However, there has been less development in the current virtual learning environments (VLEs) in the past few years, which remain heavily centered on single institutions. There is a clear need to integrate VLEs with the wider Web. In our research we propose to prototype a VLE that makes use of RDF (the Resource Description Framework) and the Semantic Content Management System (SCMS) Drupal to provide a more open learning environment. Essentially, we aim to use semantic web technology to develop and enhance VLEs by linking to social networks and supporting dynamic content composition for e-Learning services. The paper will introduce our work that we are currently prototyping to demonstrate the advantages of semantic web technologies for VLEs

Coldwell, J., et al. (2012). Which e-Learning Technology is Right for me: The range of technologies available to support teaching and learning in higher education continues to grow exponentially. There is a growing expectation for educators to be well informed and familiar with the many suitable technologies and systems that are available to be used for delivering courses online, and to complement classroom (face-to-face) education. Detailed evidence of the perceptions and applications of the use of e-technologies is needed to inform not only teaching practice, but also policy development. These e-technologies need to be matched to pedagogical styles in order for online teaching and learning to be successful. Based on 33 semi-structured interviews, this paper presents a study of staff experiences of e-technologies, using Chickering and Gamson's 'Seven Principles of Good Practice' to provide educators with information about the most appropriate e-technology to support their pedagogical aims.

Cam, E. et al. (2012). A New Addiction for Teacher Candidates: Social Networks: With the transition to being a knowledge-based society, the internet usage has become an irreplaceable

part of life. As social networks have come into our lives, the internet usage has taken a different dimension. People can affiliate to social networks in order to make friends, exchange information, find partners, and to play games. The process that starts with membership then turns into an addiction. The internet addiction is along with the addiction to social networks, which is one of the today's matters. The study used quantitative model. Facebook Addiction Scale was used to collect data and t-Test and ANOVA analyses were used to determine whether there is a difference between gender and classes according to the Facebook addiction. The findings of this study revealed that there is a significant difference between gender and classes according to the Facebook addiction. It was found that Facebook addiction levels of males were higher than those of females. Besides, it was found that Facebook addiction levels of seniors were higher than those juniors, sophomores and freshmen.

Jenkins-Guarnieri, et al. (2012). The Relationships among Attachment Style, Personality Traits, Interpersonal Competency, and Facebook Use: Among emerging adult populations, the increasingly prevalent use of online social media, such as Facebook, and its relationship to individual personality traits and interpersonal relationships are of growing interest to researchers. The current study sought to investigate how attachment style, personality traits based on the Five Factor Model, and self-esteem were related to perceptions of interpersonal competency and Facebook use. Using data collected from 463 emerging adults in college, we conducted three hierarchical multiple linear regression models which suggested that (a) extraversion was positively related to Facebook use, (b) attachment style, extraversion, agreeableness, and openness were positively related to two aspects of interpersonal competency, and (c) Facebook use was negatively related to competence with initiating interpersonal relationships. Future directions for research and practical implications are also discussed.

Seo, K.K.J. et al. (2012). Becoming "Trendy" with Web 2.0 Social Media. In T. Amiel & B. Wilson (Eds.): In this presentation, we will discuss how a variety of online social media instruments can be put into place to not only set in motion a positive learning experience but to also support instructors. We will introduce successful cases using wikis, Flickr, VoiceThread, and Second Life in higher education settings. Online social media can not only facilitate meeting course objectives but also promote renewed student commitment to learning. However, it is important to note that multiple challenges lie ahead in integrating the use of online social media into the classroom. Hopefully this presentation can help implement these tools successfully and yield an understanding that it is not a difficult endeavor to conquer but it is an intentional venture to come to the edge and meet the students on their terms.

Wu, S.Y., et al. (2012). The Influences of Social Self-Efficacy on Social Trust and Social Capital--A Case Study of Facebook: Facebook is currently the most popular social networking service in the world. With such tremendous influence on community networks, Facebook has been attracting considerable attention both from the media and academia. A review of the literature indicates that most researchers are concerned primarily with the influence of personal traits on online interactive behavior. This study began from the premise that self-efficacy, the confidence of individuals to function in an online-community, is a key element influencing participation in on-line social networks. This study attempted to establish a model of the social traits of Facebook users, and our results indicate that social self-efficacy has a positive influence on social trust; social trust has a positive influence on social capital, and social trust mediates the relationship between social self-efficacy and social capital.

McCarthy, J. (2012). International Design Collaboration and Mentoring for Tertiary Students through "Facebook": This study explores the efficacy of the online social networking site "Facebook," for linking international digital media student cohorts through an e-mentoring scheme. It reports on the 2011 collaboration between the University of Adelaide in Australia, and Penn State University in the United States. Over one semester, twelve postgraduate students in Australia and ten undergraduate students in the United States took part in an online mentor scheme hosted by "Facebook." Students were required to submit work-in-progress imagery each week to a series of galleries within the forum. Postgraduate students from Adelaide mentored the undergraduate students at Penn State, and in turn, staff and associated industry professionals mentored the Adelaide students. Interaction between the two student cohorts was consistently strong throughout the semester, and all parties benefitted from the collaboration. Students from Penn State University were able to receive guidance and critiques from more experienced peers, and responded positively to the continual feedback over the semester. Students from the University of Adelaide received support from three different groups: Penn State staff and associated professionals; local industry professionals and recent graduates; and peers from Penn State. The 2011 scheme highlighted the efficacy of "Facebook" as a host site for e-mentoring and strengthened the bond between the two collaborating institutions.

O'Bannon, B., et al. (2013). Using Facebook as an Educational Tool: Effects on Achievement: This study examined the effectiveness of using a Facebook group to increase preservice teachers' knowledge of core technology topics. Further, it examined their use of Facebook, their use of a course related Facebook group, their participation habits in the group, and their perceptions of the use of Facebook for educational purposes. The results revealed a significant gain in achievement. Additionally, they use Facebook the most to maintain existing



relationships, to share photographs, and to communicate. They used the Facebook group to lurk/read, post comments, “like” comments, and post additional information. They indicated that the Facebook group was beneficial in improving readiness for course assessments, was convenient, provided a good means of communication, and enhanced their learning.

Forkosh Baruch, A. et al. (2013). Teachers: To Be, Or Not to Be (Your Students’ Facebook-friends): Student-teacher relationships have been heavily influenced by the emergence of social network sites (SNS). At the same time, policymakers are concerned about the implications of student-teacher connections using them, often resulting in banning such communication. However, there is meager empirical evidence supporting such steps. This paper presents two qualitative exploratory studies, involving lower and higher secondary school Israeli students (N=11) and teachers (N=5), examining the relations between Facebook-based student-teacher communication and student-teacher relationships. Overall, students and teachers exhibited similar perceptions of SNS-based student-teacher communication. Findings suggest that instances in which such communication exists were beneficial for both parties. Normally facilitated only upon the teacher’s consent, findings also suggest that policies for banning such communication might be destructive for teachers who are willing to use SNS and for their students.

Khaddage, F. et al. (2013). Community-Based Learning (CBL) via Facebook Mobile “It is Time to BYOD (Bring Your Own Device): The penetration of social networking platforms such as Facebook is becoming pervasive in education, along with mobile applications (apps) and mobile devices. Students are using these technologies and apps to organize their learning material. Social media via apps is the most popular activity among college students. In this paper, we discuss how teachers could take advantage of Facebook social media platform to promote community-based-learning environment that is flexible, portable and challengeable. We describe how this could be achieved with no restriction to any particular mobile device brand or operating system and how student would simply bring their own device (BYOD).

Smala, S., et al. (2013). Involving Faculty digital reluctant in a blended learning approach – Facebook, Blackboard and clickers: This paper presents a research project in a teacher education course for first year university students that focused on a blended learning approach. Guest presenters of weekly lectures were asked to consider a variety of digital learning support tools, including clickers, Blackboard and Facebook, in their pedagogical decisions. The focus of this paper is the presentation and analysis of data collected from teaching staff involved. The paper concludes that guest presenters want to retain a sense of control of the pedagogical impact they are planning for their students; for this purpose, the paper offers a set of recommendations to improve access and use of digital tools in university teacher education courses.

Reed, A. et al. (2013). Social Media: Is there a Need for Professional Best Practice Etiquette for Undergraduate Students: In the 21st century having a social media account has become deeply ingrained in our society; the old way of networking via who you knew or who knew you is no longer in play. Today a large portion of personal and professional networking is done via social media. With that being said the old way of networking had unwritten rules of engagement which were that you did not embarrass yourself or anyone within your network. This study will gauge the need for student awareness in the professional best practices of social media interactive communication. The study is aimed at examining social media use in undergraduate students examining the types of interactions they engage in and what type of social media citizens (good, bad or ugly!) they are; investigating whether or not it is time for universities to add professional social media best practices to the curriculum.

Taffe-Campbell, R. (2013). To Facilitate Online Questioning on Facebook in an Effort to Motivate Students: With the advent of new media in the 21st century, social media has spiraled into unbelievable proportions. Among these social media, surveys have shown that Facebook is the new craze. The popularity of this social networking site, especially among adolescents, should be capitalized on by Educators for educational pursuits for our learners. This paper supplies with references the account of a sample of 41 students who were academically engaged from an Island in the Caribbean. By using videos and Facebook for learning, students' confidence and comfort were increased.

Linek, S., et al. (2013). Just for the Image? The Impact of Web 2.0 for Public Institutions: Web 2.0 is of growing importance and nowadays a hot topic for public institutions. However, it is still an open question if users appreciate and recognize the merit of Web 2.0 applications in the context of public institutions. The presented paper describes first empirical findings on users' reactions on the linkage of a modern library 2.0 with Web 2.0 applications, namely the presence in social networks and the integration of blogs and wikis. The results showed that most users didn't recognize the benefit of Web 2.0 in the context of the homepage of a library 2.0. However, even though they didn't use the accordingly Web 2.0 links by themselves, they thought that the connection to Web 2.0 is a necessity for the image of a modern library. These findings imply that the connection to Web 2.0 is important for the image of a modern public institution but the surplus benefit has to be better communicated and to be made more visible on the conventional homepage in Web 1.0.

Kuder, J. et al. (2013). Using Facebook to improve social communication skills of students with autism: Significant impairments in social interaction are one of the major characteristics of individuals with autism spectrum disorders. With the emergence of social media,

there is an opportunity to use this new media to enhance the social interaction skills of individuals with autism. In this presentation, we will discuss two studies that examined the effects of using Facebook to improve the social communication of students with Autism Spectrum Disorders (ASD). In the first study, Facebook was used as a means to increase interactions between a high school student with autism and his peers. In the second study, nine high school students with ASD used Facebook as a means to increase their social interaction. The results show that students in both studies improved their skills in initiating and reciprocating social communication through the use of Facebook. Implications for using social media websites in school environment will be discussed.

Reed, A. (2013). Social Media: Is there a Need for Professional Best Practice Etiquette for Undergraduate Students: The Main object of this research will be to gauge whether currently there is a potentially a social media stage that could cause current undergraduate students damaged public images, which could cause them to lose potential careers and jobs due to badly portraying themselves vial social media and if so what can be done to foster a better or "Best Practice" social media image environment for undergraduate students to avoid creating a bad social media public image of themselves; which warranted asking the following question: Do students comprehend the possible long term and short term damage that can be cause to their future careers via uneducated social media postings; and have students already damaged their future career potentials with improper social media etiquette?

Bray, E. et al. (2013). Mobile Computing and Educational Innovation in Japan: Japan is well known for its economic and technological development but lags behind other industrialized countries, e.g. USA, Britain, South Korea, Singapore, etc. in its use of IT in education. Over the past 20 years there have been various governmental initiatives to increase the use of IT in education such as the "e-Japan Strategy," "New IT Reform Strategy," and "e-Japan Strategy 2015," however they have often failed to achieve their goals. This paper will discuss some possible reasons for this and then discuss the potential for use of mobile devices such as mobile phones and tablet computers in Japanese education.

Adu, E. et al. (2013). A Comparison of Social Networking Sites Use among Undergraduate Students in Two Selected African Universities: University of Ilorin, Nigeria and BA ISAGO University College, Botswana: The study examines through survey approach a comparative analysis on the use of social networking sites by undergraduate students of university of Ilorin and BA ISAGO University College. A total of 400 undergraduates students were drawn from four faculties from each of the university. Questionnaire was used to collect data from the respondents. Five research questions were developed and answered. The results obtained have suggested that respondents were familiar to and use SNSs; while the most commonly use SNSs revealed include

Facebook, MySpace, YouTube and Twitter. The most prominent uses of SNSs are for making friends and chat with friends, sending and receiving messages. More respondents used the SNSs on a daily basis at the BA ISAGO University College than University of Ilorin. Respondents from both universities clearly indicated that SNSs contribute to their learning in terms of improving their grade performance and as means of educating one another.

Evans, R. et al. (2013). *Creating 21st Century Learners: Edmodo in the Social Studies Classroom*: The objectives of the current paper look at what social networking tools, such as Edmodo can do for the Social Studies classroom. Social Studies classrooms of the 21st century need to be designed around social networking structure that assists teachers in meeting curricular goals while students benefit from a flexible interface the keeps them engaged. Social networking tools have the potential to reinforce student-centered learning through opportunities of inquiry. Teachers and students stand to benefit from social networking tools like Edmodo. Additionally, the paper details lessons that social studies teachers can use in their own classroom.

Hennis, T. et al. (2013). *Social Media to Foster Self-organized Participatory Learning for Disengaged Learners*: This paper is an innovative learning approach developed and used to re-motivate the disengaged from education and learning to connect to lifelong learning practices. These youngsters constitute a considerable social problem in Europe and the aim of the project is to find ways to recover the intrinsic motivation to learn and thereby improve the opportunities for participation. Key in this innovative strategy is self-organized learning, the learner in control of the learning process. The paper starts with an introduction on the challenge these dropouts pose to the society at large and the learning strategy developed to cope with this matter. The usage of media in the methodology is crucial and links to the concept of a user-configurable Personal Learning Environment (PLE). The main research issues are: can react change the attitude, what are the benefits and drawbacks of this self-organized learning approach and do the ICT tools support these processes. This paper covers the first half of the project and reflects on the first rather positive experiences.

Ruangrit, N. (2013). *A development of project-based and blended learning activities using social media tools to enhance article writing skills of graduate students at Silpakorn University*: The purposes of this research were to develop project-based and blended learning activities using social media tools to enhance article writing skills of graduated\students at Silpakorn University; and to study the article writing skill of graduate students, Silpakorn University. The instruments were interviews, quality assessment, and article assessment. The results showed that project-based and blended learning activities were constructed with a theory-based format

which consisted of project based learning, blended learning, research studies on social media tools, and article writing skills.

Chen, X. (2013). Virtual Team Collaboration in Pre-Service Teacher Education: The author of this presentation shares a case of four cross-cultural student teacher teams working in a project that required virtual collaboration in implementing a technology integration project. Twenty-three pre-service teachers from United States were assigned to four teams to research four different Web 2.0 applications. Each team worked with another international team that consists students from other countries. In total, forty-three students worked in this project. Each collaboration team created a wiki chapter for the Web 2.0 assigned to their team. This presentation will discuss the challenges of virtual team collaboration and pre-service teachers' learning in this type of learning. This presentation will also share the process and implications of communication and coordination within the international collaboration teams. Lessons learned in facilitating virtual team collaboration in teacher education and technology integration will be shared with researchers, faculty, or teachers who are interested in technology integration.

Wilk, S., et al. (2013). Social Video: A Collaborative Video Annotation Environment to Support E-Learning: Our social video system allows users to enrich video by additional information like external websites, hypertext, images, other videos, or communication channels. Users are able to annotate whole videos, scenes, and objects in the video. We do not focus on a single user accessing the system but on multiple users watching the video and accessing the annotations others have created. Our web-based prototype differs from classical hypervideo systems because it allows annotation (authoring) and navigation in videos by focusing on collaboration and communication between the users. The prototype is integrated into the online social network Facebook and was evaluated with more than 300 users. The evaluation analyzes the usage of the system with a learning scenario in mind and indicates a learning success of users.

Bastiaens, T.J. et al. (2013). Education and Information Technology 2013: A Selection of AACE Award Papers: We are proud to present to you this selection of 15 award winning papers from AACE's conferences (<http://AACE.org/conf>). This year's selection includes papers from the annual conference of the Society for Information Technology & Teacher Education (SITE) in Austin (TX), World Conference on Educational Multimedia, Hypermedia and Telecommunications (Ed-Media) in Denver (CO) and World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education (E-Learn) in Montréal (Canada). The decision to nominate a conference paper for an award was made by peer reviewers. All authors were honored during the conference and received a certificate that serves as testimony to their outstanding research and contribution to the conference. This AACE book groups the award winning papers into four parts. These four parts

provide a timely overview and record of topics that are of primary interest in educational technology this year.

Magro, M., et al. (2013). Investigating Ways to Use Facebook at the University Level: A Delphi Study: Social networking sites have experienced tremendous growth and have become an integral part of the daily lives of a large portion of the population, both in the United States, as well as worldwide. Whereas a vast majority of university students log in to Facebook every day, both research and implementation of Facebook as a learning tool in higher education is lacking. This study investigates the question, "How can Facebook be used to enhance educational experiences beyond the traditional classroom?" To facilitate this research a multi-round Delphi study was conducted among students from a southwestern university in the United States with the purpose of generating and ranking ideas regarding the use of Facebook at the university level. Results are reported and discussion and conclusions are presented.

Dogan, B. (2013). College students' attitudes toward using Twitter in the classroom: A research study was conducted in a small, private college in urban Houston to better understand the benefits and challenges of Twitter use in the classroom with respect to interactive learning. Specifically, this article outlines and describes the results of this study which investigated the attitudes of undergraduate students toward utilizing Twitter in the classroom for learning activities such as creative group work, quizzing and polling, and in and after class discussions. In addition, this paper analyzes students' perspectives about the value of Twitter, the impact the above mentioned learning activities' had on their understanding and comprehension of class material, and their future plans for incorporating Twitter in their academic and professional careers.

O'Bannon, B., et al. (2014): The Writing on the Wall: Using a Facebook Group to Promote Student Achievement: This study examined the effectiveness of using a Facebook group to increase preservice teachers' knowledge when one was used as a forum to share, answer, and discuss content-related questions in a technology course required for all students seeking teacher licensure. Further, it examined the students' prior use of Facebook groups, how the treatment group used the group, and their perspectives of the use of Facebook as an educational tool. The results revealed no significant gain in achievement. Almost all participants had prior experience using a Facebook group, and the primary purposes of these groups were for organizing events, communication within organizations, communication within classes, and lending support to memorials/dedications. Although participation in the group was required and linked to a grade, most of the participation was characterized as very low level (i.e., "liking"), with only half supplying the answers to questions and about one fifth making comments. Their perspectives on whether Facebook can be used for educational purposes were lukewarm, yet they indicated significant

change in their perception that Facebook assignments were an invasion of privacy. While they perceived the idea to be good, they viewed the expectations for participation as too lenient, thus causing lack of in-depth participation.

Hilscher, J. A case study examining how students make meaning out of using Facebook as a virtual learning community at a Midwestern university: The purpose of this qualitative case study was to explore how peer mentors make meaning out of using Facebook as a virtual learning community. With the prevalence of Facebook usage by college students, and the introduction of Facebook into academic settings by educators, program facilitators, administrators, and recruiters, researchers have begun to examine the impact of Facebook as a virtual learning community. Currently, there has been a missing voice in the research, the voice of the students involved in the use of Facebook as a virtual learning community. Facebook presents itself as an ideal vehicle for a virtual learning community, but it's not known how students perceive the use of a social tool in an educational setting. The current literature is mainly quantitative in nature, focuses on how students use Facebook in a social setting, and addresses student academic performance resulting from the use of Facebook as a social tool. This case study examined how peer mentors perceive the use of their social tool in an academic setting. The current literature on virtual learning communities is beginning to examine Facebook usage, but not how the students perceive the use of Facebook as an academic tool. The participants for this case study were five peer mentors who had belonged to the virtual learning community the previous year. These peer mentors had two years of experience within virtual learning communities that were hosted as Facebook groups. The peer mentors shared their experiences of what they believed made Facebook work as a virtual learning community. One might expect that the peer mentors would recommend using Facebook in all classes, especially given that the peer mentors believed that society held a perception that students are constantly on Facebook. The peer mentors described specific settings, actions, and requirements of the program facilitator needed in order to make Facebook function as a virtual learning community. The study provided a voice to the peer mentors, and the peer mentors provided direct messages to those who might use Facebook in how they believed Facebook should be used as a virtual learning community. I proposed a model for implementing Facebook as a virtual learning community in higher education settings. The model was constructed through a careful examination of existing literature and based upon data from my case. The purpose of a case study is to lay the foundation for future research; this case study laid the foundation for future examination into the academic implications for students who use Facebook as a virtual learning community.

Kenderes, A.M. Facebook, Political Narrative, and Political Change: A Case Study of Palestinian Youth: In this dissertation, I aim to advance political narrative theory by exploring the use of political narrative on Facebook and the possibility for Facebook to be used among Palestinian youth for political change. To examine the concepts of political narrative and political change, I developed a model for political change based on the changing political narratives which in part prompted the 2011 Egyptian revolution. The model, Political Narrative Perspectives (PNPs), identifies individual and reported collective beliefs regarding the relationship and responsibilities associated with government and citizenry, and may be used to track political change as a byproduct of changing beliefs. To explore this model within the Palestinian context, I conducted a multiple-case case study in which I followed the Facebook activity of 14 Palestinian youth (7 male, 7 female; aged 18-27) for one year (January 1–December 31, 2011), coding 10 percent of their Facebook posts (N=1,371 of 13,710 posts) using content analysis. I combine this research with interviews to contextualize the content analysis. The youth participants of this study were selected for their similarity on several measures to the Egyptian youth leaders who spearheaded political change efforts on Facebook: 1) university-educated, 2) of the Millennial generation, 3) internationally traveled, 4) politically concerned, and 5) fluent in English. The Facebook posts were coded and analyzed according to type, content and language as well as by the four PNPs which I outline in this dissertation: External State Political Narrative (ESPN), Internal State Political Narrative (ISPN), External Citizen Political Narrative (ECPN) and Internal Citizen Political Narrative (ICPN). PNPs were analyzed initially through what I have termed "direct" PNP use: participants post political opinion comments about Palestine on their Facebook wall which reflected a PNP. Following this, I conducted a secondary analysis in which I analyzed posts according to what I have termed (1) "indirect" and (2) "passive" political narrative perspectives; that is, (1) participants posted Palestine-related news stories on their Facebook wall which reflected a PNP, or (2) participants posted content on their Facebook wall unrelated to Palestine which reflected a PNP. The results of this study indicate that PNPs in total comprised 15.3 percent of all participants' Facebook posts. The remainder (84.7 percent) of Facebook post content reflected topics such as hobbies, music, technology, literature/quotes, religion, relationships, and personal stories and anecdotes, suggesting that these youth in many ways use Facebook like other youth their age. While 15.3 percent may seem a relatively low number of PNPs for politically-concerned participants, 86 percent of participants noted that they felt restricted on Facebook, most notably by the Israeli and Palestinian authorities (which monitor and at times punish for certain Facebook content), but also by family and friends and by religious and social mores. Without these restrictions, 64 percent of participants stated they would critique Israel, 57 percent of participants stated they would critique the Palestinian government, and 49



percent stated they would critique Palestinian society. The prospects for using Facebook for political change in Palestine, as in Egypt, seem relatively dim given the perceived and actual restrictions that Palestinians encounter when using Facebook. The prospects for change seem dimmer still when we consider that Egyptian citizens faced one governing oppressor—the Mubarak regime—while Palestinians face political and social oppression from both the Palestinian government (whether by the Palestinian Authority (PA) or Hamas) and a U.S.-backed Israeli authority. The PNPs do offer some hope, however, as well as help to shed light on the political change process. Unlike in Egypt, where an initial change in Internal Citizen Political Narrative (ICPN), a secondary change in External Citizen Political Narrative (ECPN) and a tertiary change in Internal State Political Narrative (ISPN) ultimately resulted in a change in External State Political Narrative (ESPN), in Palestine, it appears the opposite direction would be most effective to bring political change. In other words, in Palestine, it appears the External State Political Narrative (ESPN) would do well to change first, resulting in a subsequent change in Internal State Political Narrative (ISPN), External Citizen Political Narrative (ECPN), and Internal Citizen Political Narrative (ICPN). It appears the moral image which Palestinians appear to use to win the war for comparative moral high ground with Israel may indeed be hindering them from achieving political change. While these results offer potential insights into possibilities, the Political Narrative Perspective (PNP) model will need further testing and development through future research.

Alexander, C.M. Facebook usage and academic achievement of high school students: A quantitative analysis: Online social networking has become an integral part of the lives of America's teenagers with 73% of teens reporting that they use a social networking site such as Facebook daily (Lenhart, Purcell, Smith, & Zickuhr, 2010). Some recent studies have shown a negative relationship between Facebook use and academic achievement (Karpinski & Duberstein, 2009), while other studies have shown no relationship between Facebook use and academic achievement (Pasek, More, & Hargittaai, 2009). Thus, parents, teachers, and administrators remain uncertain of the effects, if any, of students using Facebook. This study examined Facebook usage and academic achievement of high school students at Dollarway High School. 72 students completed two surveys—the Facebook Intensity Scale (FBI) and ENGAGE for grades 10 to 12. The FBI measures the amount of time a student spends on Facebook, the extent of a student's participation on Facebook, a student's emotional connection to Facebook, and a student's integration of Facebook into his/her daily life. ENGAGE measures 10 psychosocial behaviors that affect academic achievement of students including academic discipline, academic self-confidence, commitment to college, communication skills, general determination, goal striving, social activity, social connection, steadiness, and study skills. Students' GPA information was also collected. Results of the study

showed a negative relationship between intensity of Facebook use and GPA, a negative relationship between intensity of Facebook use and goal striving, and a negative relationship between intensity of Facebook use and steadiness. These findings indicate that a negative relationship does exist among Facebook use and academic achievement for some populations. More research is needed to determine why these negative relationships exist in some populations and not in others.

Hart, M.J. A study on the motives of high school and undergraduate college students for using the social network site Facebook: An online survey conducted at a mid-Atlantic university and two high schools located in close geographical proximity sought to determine the motives for using the social network site Facebook.com. A redesigned instrument based upon the Interpersonal Communication Motives (ICM) scale used in past uses and gratifications research measured motivations for Facebook use. Motives of undergraduate college students and high school students for using Facebook attempted to predict attitudinal and behavioral outcomes of Facebook use. The study compared the descriptors of the behavioral and attitudinal outcomes of high school students to the descriptors of the behavioral and attitudinal outcomes of undergraduate college students. High school students were motivated to visit Facebook to pass time. In contrast, relationship maintenance was the most salient motive of undergraduate college students to visit Facebook. Four of six behavioral and attitudinal questions on the instrument failed to produce statistical significant differences between undergraduate college students and high school students. The amount of Facebook use, frequency of Facebook use, satisfaction with Facebook, and attachment to Facebook were not notably different. Two of the six behavioral and attitudinal descriptors did show statistically significant differences. These included the duration of Facebook use and amount of Facebook friends. Undergraduate college students had been using Facebook for a longer period than high school students. High school students had significantly more friends on Facebook than undergraduate college students.

Lau, A.R. Facebook as a facilitator of organizational identification in colleges and universities: Exploring relationships among educational institutions, student tenure, and interaction with multiple organizational targets: Potential uses for Facebook are frequently studied in scholarly literature. To date, much of this research focuses on varied social uses available to Facebook members. More recently, scholars have turned to potential academic uses of Facebook, and more generally, how Facebook might be used in educational institutions such as colleges and universities. Each college and university is a unique organization and it is likely that each one uses Facebook in a variety of different ways. However, consistent to all colleges and universities is the goal of creating strong levels of identification between the student and the school to form connections between institutional members. This dissertation provides an exploratory investigation to examine how

students' interactions with universities on Facebook efforts might facilitate identification with the school as well as with various subgroups or targets (i.e. students, faculty, staff, major, alumni) within the institution. The researcher collected data from 343 participants. Frequency of Facebook access was not linked to identification; rather, data indicated that the number of Facebook friends also present at the same school was a useful predictor of student levels of identification. The institution at which a student was enrolled moderated the relationship between several predictor variables and identification. Specifically, institution moderated a positive relationship between one type of information sought on Facebook (religious communication) and identification and a negative relationship between two types of information sought on Facebook (student-to-student communication, student-to-faculty communication) and identification. Further, results indicate that students identify differently with various college and university targets, as the type of information sought on Facebook ranged across institutional targets. Facebook is a powerful tool for connecting with students, but additional longitudinal research is necessary to better understand how Facebook helps develop identification at colleges and universities.

Neely, L.S.P. An analysis of Facebook intensity and privacy management practices of public school educators in the United States: Social networking sites like Facebook continue to gain popularity among all segments of the population (boyd & Ellison, 2007; Madden & Smith, 2010). Public school employees all over the country are finding themselves facing disciplinary action due to participation in this fast growing fad. The problem is that there is a lack of clarity in the areas of policy and practice regarding SNS (Butts, 2008; Carter et al., 2008; Eltringham, 2010; Foulger et al., 2009; Garland, 2009; Madden & Smith, 2010; Openhuizen, 2008). The researcher accessed educators who use Facebook through groups on Facebook associated with education. Participants completed demographic questions, the Facebook Intensity Scale (Ellison, Steinfield & Lampe, 2007) and the Facebook Privacy Management Measure (Child, Pearson & Petronio, 2009) by way of an online survey provided through Google Forms. The researcher analyzed the data in order to describe the general level of educator Facebook intensity and the three domains of their privacy management: boundary permeability, boundary ownership and boundary linkages and found significant inverse correlations between Facebook intensity and age as well as boundary permeability and age. A significant positive correlation was found between Facebook intensity and boundary permeability. Significant differences were found between males and females on boundary ownership and boundary linkages. Increased understanding of the attitudes and ethics of this area might lead to greater clarity, better policy, and sounder bases for administrative decision-making in this area. The information gained from this study can assist school leaders when providing professional learning regarding the appropriate use of SNSs for both instructional and

personal use. Finally, the results of this study can provide instructional technology leaders with new ways to effectively use Facebook as an instructional tool or to inform the design of new social networking technology that better fits within the culture of the educational institution. More research is needed in order to have a clear and rich understanding of the ways that educators interact with Facebook. An analysis of other demographic variables may result in a greater depth of information. Research using a qualitative approach could generate a greater understanding of the reasons why educators use Facebook or other social media in the ways that they do. Legal research could be conducted because the law is not clear regarding an educator's duty of care when it comes to knowing what current or former students are publishing from their private lives on SNSs.

Masin, R. The effects of Facebook use on college students' interpersonal development. Master's thesis, Oklahoma State University: This quantitative study analyzes Facebook use intensity, sex, and the development of mature interpersonal relationships of students at Oklahoma State University. Findings and Conclusions: Correlation analysis yielded small but significant negative relationships between the development of mature interpersonal relationships and Facebook use intensity, with slightly more negative correlations found when only peer relationships were considered. When broken down into females and males, no significant correlations were found unless only peer relationships were considered, in which case both females and males showed negative relationships similar to the entire sample. Two way ANOVA analyses established that both sex and Facebook use intensity have a significant effect on the development of mature interpersonal relationships. Analysis of other results found that respondents are likely spending over an hour on Facebook per day and that the majority of users have "over 400" Facebook friends. The conclusions drawn from these results were that students might be going through an evolutionary process of integrating Facebook and other social media into their routines which cannot be necessarily be accounted for by the somewhat dated (1999) MIR Task. Correlations were negative and small, but still significant, and Facebook use accounted for less than six percent of the development of mature interpersonal relationships. ANOVA analysis shows a significant difference between "heavy" and "light" users, which indicates that students who more intensely use Facebook have less developed mature interpersonal relationships than those who did not. This indicates that Facebook use might have a negative influence on mature interpersonal development. Future research should seek to take more channels of social media into consideration, integrate students' use of the internet and social media into student development theory and update current instruments for better analysis.

Gutschmidt, A.M. A Case Study Investigating the Use of Facebook as a Learning Management System in Higher Education: North Carolina State University This dissertation

addresses the issue of using the social networking website, Facebook, for educational purposes by examining how it was used in an upper-level public relations course. Research on education suggests instructors should find ways for their students to take a more active approach in learning and can do so by having them engage in additional dialogue. Social networking technology affords users the opportunity for extended communication on shared concepts. Popular social networking websites, like Facebook, have primarily been used for social and entertainment purposes, helping friends and family members remain connected. While the communicative effects of social networking have been examined, little is known about its impact when used within an educational context. This study intended to discern the uses and interactions that would transpire when students and their instructor used Facebook for pedagogical purposes. In this case study, all participants were interviewed prior to the semester to identify their familiarity with and perceptions of Facebook. Participants were observed in the classroom over the course of a 15-week semester to determine how they were using Facebook. Interviews were also conducted with all participants at the conclusion of the semester to gather their reaction to the application being used in this new context. Interview responses and observations were coded and analyzed to draw conclusions on the success of this implementation. Results from the study reveal the instructors' efforts to integrate the technology into his curriculum waned as the semester progressed. Students exhibited and expressed both apathy and uncertainty towards using Facebook as a learning tool. Most students were also observed using the social networking website for non-pedagogical purposes. It is suggested that the results of this study were due to a flattened hierarchy that was created by the presence of Facebook. Joining in a social network with students, the instructor was unable to exhibit the authoritative role necessary for communicate to them how Facebook should be used in an education context. Future attempts at adopting social networking within the classroom will require clear objectives and role identification.

Brubaker, E.V. The relationship between Facebook activity and academic performance among African American students: This non-experimental, regression study examined the relationship between Facebook activity and academic performance for an African American sample population. The study was conducted at a large, four-year, private university in the Mid-Atlantic. All undergraduate, African American students enrolled in the College of General Studies, School of Health Sciences, and School of Education comprised the sample population. Volunteer participants completed a Facebook Activity Survey, which is an instrument used to collect semester grade point averages (GPAs), time-use of Facebook, multitasking information, type of Facebook activities, and demographic information. The results of the survey were analyzed using hierarchical multiple regression statistics. The analysis showed the strength of the relationship between the predictor

variables (average daily minutes of using Facebook, demographic data, academic data, daily minutes of multitasking, and types of Facebook activities used while multitasking) and the criterion variable (semester GPA). The results of the study suggested that Facebook activities did not have a statistically significant contribution on the participants' semester GPAs.

Powless, S.J. College Student Satisfaction: The Impact of Facebook and Other Factors: Participants reported using Facebook both for academic and non-academic purposes. Participants also reported using Facebook regularly, often multiple times a day for various activities. Data analysis conducted within this study suggest that participants who used Facebook regularly are more satisfied with various facets of their college experience, including academic and social experiences. This increase in level of satisfaction among participants appears to be mediated by feelings of being connected to the college or university environment. Results from the study have implications for both academic and student affairs professionals, concerning policy decisions on how college or university stakeholders utilize social media for academic purposes including pedagogy, recruiting, student learning, and student outreach.

Kasch, D.M. Social Media Selves: College Students' Curation of Self and Others through Facebook: This qualitative study used cyber-ethnography and grounded theory to explore the ways in which 35 undergraduate students crafted and refined self-presentations on the social network site Facebook. Findings included the identification of two unique forms of self-presentation that students enacted: curated self and a commodified self. The curated self was a digital self-presentation created through an ongoing curatorial process of organizing media elements within a Facebook profile to create a distinct digital embodiment of self that was both separate from and a continuation of a user's physical self-presentation. This curated self-included three layers of curation to address the multiple types of audiences students engaged through Facebook: a personal curation of content primarily for themselves, a social curation of content for connecting with acquaintances, family, and friends, and a spectacle curation of content for strangers and authorities to assess. Linking these three layers of curation together were four uses of Facebook: as entertainment as a relational tool, as a pragmatic tool, and as a scrapbook. These uses and layers of curation all existed concurrently with specific variations for individual students. The commodified self was an amplification of the curated self as an identity surrogate that was a resource and object for production, consumption, and distribution. These commodified selves emphasized identity and self as forms of capital that one owns, rather than what one "is" or "does." Within the commodified self-there were three major foci of activity: self as commodity, others as commodities and Facebook Citizenship. Key findings for these foci include the treatment of profiles as disinterested resources, an articulation of a continuum of creeping and definitions of good and bad citizenship.

Discussion of these findings addressed curated and commodified selves as parts of the individually and socially constructed nature of Facebook, as well as opportunities for faculty and student affairs practitioners to help students develop greater critical awareness of their self-presentations on and uses of Facebook. Implications for practice and future research included suggestions for campus climate initiatives, the development of online learning environments, and the application of student development theory to self-presentations on Facebook.

Huppe, A. An exploratory study of students' use of Facebook and other communication modalities in order to receive student affairs information: This qualitative study explored Facebook as a communication tool for student affairs and compared it as a source with other communication modalities to describe the 18–24 year old student preference on receiving information about student affairs departments and activities. The research questions were designed to provide feedback on the current purpose[s] of student use of Facebook for student affairs services as well as reporting additional services and activities that would be considered through the use of Facebook. Differences in use among institutional types were also explored. The results of 395 online survey responses were compared to focus groups consisting of student ambassadors at a two-year public, four-year private, and four-year public institution. The online survey participants were asked to respond to specific modes of communication based upon each service or activity. The focus groups were asked the same questions in an open-ended format and the results were compared to the online results. The results indicate that depending on the event or activity, the students preferred a different method of communication, not necessarily Facebook for information on student affairs programming. These results also differed among institutional types. Two-year institutions have the greatest potential to increase their presence on Facebook. One theme that emerged from the open-ended response question in the online survey was that institutions participating on Facebook should limit content so that it is more social in nature and leave academically related issues to institutionally driven communication modalities. There are numerous options to communicate information to students and finding the best one may be more challenging than actually disseminating the information. With the administrative challenges and lack of student responses encouraging Facebook usage, institutions of higher education are not encouraged to spend enormous resources in this one particular communication modality. Given the high number of responses from the online survey combined with feedback from the focus groups, enhanced email options or web portal content might serve the current needs.

### **3.0 Introduction**

This chapter deals with methodology employed in order to achieve different objectives and to verify hypotheses of the study. It deals with sampling procedures, design, the tools used, details on collection of data and statistical techniques employed for analysis and interpretation of the data.

### **3.1 Population**

The population of the study will cover pre-service secondary teacher trainees of Karnatak University, Dharwad in Karnataka State. There are about 34 affiliated B.Ed. Colleges under the Karnataka University, Dharwad. All the B.Ed. students of approximately 100 of Karnataka University, Dharwad formed the population of the study.

### **3.2 Sample**

This research required Internet access and ICT connected technological gadgets. So the investigator had chosen his student-teachers of KSS Vijayanagar College of Education, Hubli, as a sample of experimental group where the researcher was working as assistant professor and student-teachers of KLE College of Education, Hubli as a sample of controlled group. Both the colleges are aided institution affiliated to Karnatak University, Dharwad.

All student-teachers in the both colleges were included in the sample and sample would be exactly one hundred taken from both colleges together. Fifty student- teachers for experimental group, KSS Vijayanagar College of Education, Hubli and fifty student- teachers for controlled group of KLE College of Education, Hubli.

### **3.3 Methodology**

In the present study Quasi Experimental, design will be employed and equivalent group will be followed.

### **3.4 Sampling Technique**

Purposive sampling technique will be employed.



### **3.5 Tools Used**

There were three tools used for the study, first one achievement test on Unit-2: Child Development and learning of Educational Psychology subject, second one scale for assessing social interaction skills and third scale on attitude towards use of Facebook.

1. Achievement Test
2. Scale on Facebook Social Interaction skills
3. Facebook Attitude Scale

#### **3.1.1 Achievement Test**

The meaning of academic achievement or academic performance is the outcome of education the extent to which a student, teacher or institution has achieved their educational objectives. Academic achievement is commonly measured by tests, examinations or continuous assessment.

Achievement Test comprising of multiple choice objective items was structured based on content topic Unit-2: Child Development and Understanding the learner of Educational Psychology (Education-3) subject instructed through Facebook based methodology meant for B.Ed. student-teachers of Karnataka University, Dharwad. The same test was used parallel form for the pre-test and post-test on both colleges' student-teachers under experimental and conventional method. First, the instructional objectives were prepared for each chapter. This would describe the type of performance pupils are expected to demonstrate. Then the course content was outlined which indicates the areas in which each type of performance is to be shown. Forty objective items were constructed. Answer keys were also prepared to maintain objectivity of scoring. The developed test was then given to experts for validation in terms of content, instruction, objectives etc. and based on the suggestions same was modified. A pilot study was also conducted on ten student-teachers of other B.Ed. colleges. The suggestions were incorporated and appropriate modifications were made and finalized. All the experts recommended that there were no changes to be made in the language used and instructions given to the test. The initial and final version of achievement test is attached in the Appendices.

#### **Content**

##### **Unit-2: Child Development and Learning**

- 2.1 Perspectives of Development: physical, emotional, intellectual, social psychological and moral meaning components and their implications to education.
- 2.2 Adolescent psychology: significance and characteristics, common emotional, social & moral problems, challenges & responsibility to education.

2.3 Stages of cognitive development: Piaget's stages sensorimotor, preoperational, concrete operational and formal, operational stage.

### 3.5.2 Scale on Facebook Social Interaction Skills

This five point scale was developed and administered in post-test for experimental group student-teachers with five options SA for strongly agree, A for agree, UN for undecided, DA for disagree and SDA for strongly disagree. Scale on Facebook social interaction skills designed based on seven elements namely General, Entertainment, Student-Content Dimension, Student-Teacher Dimension, Student-Student Dimension, Dialogue Mode and Tutorial Mode. There were total fifty questions constructed together and listed under each category. The developed test was then given to experts for technical accuracy and composition editing. For the validation of test it was tried out on individual, the student was clearly told that he was not going to be tested but his help is sought in the modification of test, the modified draft was then tried on group of 10 students of small group and Based on small group try out the researcher then brought necessary structural changes in the test draft and went a step further for testing its validity in the real testing in students' field group other than the student-teachers' selected for the study.

A field study was used along with rating scale. Participant observation was also done. The tool was given to experts and based on their suggestions it was finalized. All experts commented that rating scale was lengthy and few items could be done away with as they were more or less similar in meaning to some other items. There were connections on language and instructions of the test. As per the suggestions, the following changes were made. The fifty structured statements listed under seven categories are given below.

#### General

1. Facebook access the interaction and collaborate with friends, relatives and hers
2. Any individual or organization post their pictures, photos, videos, wishes, etc. of different occasions on Facebook wall
3. New products, advertisements, etc. can be observing through Facebook.
4. Political parties/candidates/organizations propagate their campaign through Facebook
5. Any person could express his ideology and philosophy on different issues and topics on Facebook.
6. We can make chatting, massaging and video calling
7. We can watch, post, link, share and tag any pictures, photos, videos, text, audio etc.
8. We would upload the pictures, photos, videos, text etc. of any programs or events

9. Important sightseeing, sports, cultural, historical, holy places etc. will be searched through Facebook.
10. We would watch promos of movies, cinemas, ads, products of different companies, videos etc.

**Student-Content Dimension**

11. Facebook facilitates me easily to learn the difficult deeper understanding concepts of content.
12. I prefer a face-to-face course to a Facebook-based course for learning.
13. I prefer content-sharing in formal informal education contexts.
14. Content uploaded on Facebook would be appropriate and reliable is of high value
15. I feel content in the Facebook will be accessed anytime and complements the classroom activities
15. Content on online before we learn about them in class is productive
16. I experience a different learning environment formally and informally
17. Teacher provided me with supplementary materials
18. I use the time allotted for the course more efficiently
19. I learn things which I do not know and which I do not learn in class either

**Student-Teacher Dimension**

20. Facebook socialize the teachers and students by means formal and informal teaching
21. It is an atmosphere where I could deliver and share my ideas with the instructor through online and offline mode.
22. I believe teacher should be unapproachable and formal
24. The informal sharing may damage authority and discipline of instructor
25. It is beneficial in terms of interaction with the teacher
26. I have the opportunities to ask what I do not understand in class
27. I observe teaching content through Facebook is more interesting than traditional type of learning
28. I discuss content of Facebook online as well as in classroom.
29. I enjoy cooperating with teacher
30. It promotes respect, self-esteem and self-confidence

**Student- Student Dimension**

31. It promotes me to interact with all the members of the class about study
32. Students can follow videos, ppt's pictures etc. posted by others
33. I feel it develops productive behavior of students

34. Our friends provide me with supplementary material
35. It is beneficial in terms of meeting new students
36. Communication with my classmates helps to motivate learning
37. Facebook brings students who share a common interests together
38. Helps to contribute everybody's own ideas with other students
39. Makes everyone independent learner
40. Enjoy cooperating with team members

**Dialogue Mode**

41. Content learnt through different modes informative
42. Chat box and video calling encourages for discussion, to clear doubts
43. I comment on videos, text, ppt, notes etc. which motivated me to give responses
44. I upload texts, pictures, photos videos, and ppt. etc. and got the responses on it
45. It has user friendly operation to exchange the views

**Tutorial Mode**

46. Provides comprehension through reading, watching, listening
47. Instruction through different modes like video, ppt, text, etc. is effective
48. Ppt., pdf. files and Notes are informative and comprehensive
49. Videos supports concrete examples of various concepts are appropriate and reliable
50. Facebook mode is the only platform for high value of motivation

**3.5.3 Facebook Attitude Scale**

This scale was administered to student-teachers of experimental group in post-test. Facebook attitude scale was designed with fifty statements with five options SA for strongly agree, A for agree, UN for undecided, DA for disagree and SDA for strongly disagree. . The developed statements were verified by experts about technical accuracy and composition editing. For the validation of test it was tried out on individual, the student was clearly told that he was not going to be tested but his help is sought in the modification of test, the modified draft was then tried on group of ten students of small group and Based on small group try out the researcher then brought necessary structural changes in the test draft and went a step further for testing its validity in the real testing in students' field group other than the student-teachers' selected for the study. The final draft was constructed after getting opinions, suggestions and feedback from students and experts.

The fifty prepared statements are given below. Scale on Attitude towards Use of Facebook:

1. I feel interacting with Facebook, features are enjoyable.

2. I opinion Facebook can allow me to search interesting and imaginative work.
3. I feel Interacting Facebook make me possible to work more productively.
4. Facebook make me feel uncomfortable when features are not accessed properly
5. I interact through content related links of videos, ppts, texts, pdfs' etc., on Facebook wall.
6. I feel Facebook motivate users to comment on more posts and sharings.
7. I dislike "public" feature of Facebook in teaching.
8. I feel various subjects texts can be uploaded in Facebook in "notes".
9. I feel interaction of Facebook is a waste of time.
10. I opinion Facebook links can enhance students learning.
11. I feel Facebook "update" is a fast and efficient means of providing information.
12. I do not think teacher would ever need a Facebook features in my classroom.
13. I feel Facebook interaction may encourage unethical practices.
14. I feel Facebook improvises interaction through browsing sites, downloading, saving etc.
15. I find Facebook offers real advantages over traditional learning.
16. I feel Facebook in the classroom would make the subject matter more interesting.
17. I assume Facebook has no place in colleges for the interaction.
18. I feel class time is too short for interaction through Facebook teaching.
19. Facebook interaction suits students learning preferences.
20. I opinion it would be hard for teacher to use the Facebook as a tool of teaching.
21. I have no difficulty in understanding the basic interactive functions of Facebook.
22. I can easily learn to operate videos of Facebook wall.
23. I eager to see Facebook features are proliferating as a learning tool in education.
24. Facebook will not make me any difference in our classrooms, schools, or lives.
25. I prefer learning from teachers over Facebook interactive mode.
26. I feel Facebook that suit better our culture and identity.
27. Using Facebook would not hinder Indian generations from learning their traditions.
28. I confirm requests of friends to become part of the Facebook community.
29. Facebook mode of education has proved to be effective learning environment.
30. Facebook mode enable me to learn about applications in a more efficient way compared to books, web pages, etc.,
31. I would prefer to learn about the functionality of Facebook options and applications.
32. I feel Facebook is part of my everyday activity.

33. Facebook will increase our dependence on internet, system, power supply, accessories etc.
34. There are social issues that need to be addressed before implementing Facebook in education.
35. The instructor provided basic training helped me to operate Facebook account.
36. I hesitate to use a Facebook messaging, chat box and video calling.
37. I feel interactive materials could be easily posted on Facebook wall.
38. I feel intimidated by Facebook based interaction at college, home, internet café etc. when required.
39. Two-way communication of Facebook may benefit students from communication with each other, teachers, and staff.
40. I feel Facebook based education will enhance the pedagogic value of a course.
41. I feel Facebook based interactive materials are not effective for student learning.
42. In my opinion Facebook based learning experiences cannot be equated with face to face teaching.
43. I would rather like face to face environment rather than teaching via the Facebook.
44. I am happy with content based interactive materials posted on Facebook.
45. I like to share with others about Facebook-based education materials.
46. I feel Facebook mode of instruction is difficult to handle.
47. I feel there are unlimited possibilities for the use of Facebook based educational materials.
48. I feel Facebook interaction will increase teachers' efficiency in teaching.
49. Facebook instruction can engage learners more than other digital forms of learning.
50. Facebook integrates all forms of media, print, audio, video, animation etc. would be operated by me.

### **3.6 Design of the Study**

This study is quasi experimental in nature. The Pre-test and Post-test Equivalent Groups Design was used. Purposive sampling method was employed. Random selection of the students is not possible because of situations. This design is often used in the classroom experiments when experimental and control groups are such naturally assembled groups as intact classes, which may be similar. Here the dependent variable is achievement in Educational Psychology subject, social interaction skills and attitude towards use of Facebook. Independent variable is Facebook method of teaching.

Population: 100 student-teachers of K. U. Dharwad

Sample: 50 student-teachers of KSS VCE as Experimental Group  
and  
50 student-teachers of KLE VCE as Conventional Group

Achievement Test: (Pre-test and Post-test administered to both samples)  
50 student-teachers of KSS VCE as Experimental Group  
and  
50 student-teachers of KLE VCE as Conventional Group

Scale on Facebook Social Interaction Skills:  
50 student-teachers of KSS VCE as Experimental Group

Scale on Attitude towards use of Facebook:  
50 student-teachers of KSS VCE as Experimental Group

First pre-test was given to both experimental and control group. Then experimental group was given intervention. Finally, post-test was administered to both the groups. Any experimental design will have threats to its experimental validity i.e. to internal validity and external validity. The presence of control group will take care of threats to internal validity like maturation, history and testing.

### **3.7 Facebook as Instructional Method**

It broadly constitutes the methods, procedures and techniques that the teacher uses to confront students with the subject and to bring about an effective outcome, with each method, procedure and technique having its components and procedures. Steps involved are selection of content, preparing list of instructional objectives and designing activities based on specific learning outcomes and students' needs. Each member of a Facebook wall is responsible not only for learning what is taught through formal teaching but also for helping group mates learn informally.

The steps involved in designing this strategy was selected were-

1. The relevant content to be taught was selected. There was only one chapter was selected for the study: Unit-2 : Child Development and Learning
2. Content of each chapter was analyzed.
3. Instructional objectives of each chapter were noted down.
4. Then various features of Facebook profiles were analyzed to see which operational feature is most suited to teach the selected content taking into account instructional objectives also.

5. During implementation of strategy care was taken to see that there were links and posts of videos, ppts, pdfs, notes, and photographs, etc. of growth and development of child.

**Table 1: An example of specimen lesson plan of content-meaning, definitions and characteristics of growth and development**

LESSON PLAN-1			
UNIT: GROWTH AND DEVELOPMENT		SUB: EDUCATIONAL PSYCHOLOGY	
Course: B.Ed.	Duration: 1 Hour	Lesson No: 1	Date:17-03-2014
<b>Instructional Objectives: Knowledge-( ) Understanding-( ) Application-( ) Skill-( )</b> 1) Student recalls the definitions of growth and development 2) Student distinguishes between growth and development 3) Student analysis the characteristics of growth and development 4) Student operates the features of Facebook to access the content of growth and development			
<b>TECHNOLOGICAL MODES OF INSTRUCTION:</b> Facebook-( ) Computer System-( ) Laptop-( ) LCD Projector-( ) Power Point-( ) Video-( ) Text-( ) Audio-( ) Images-( ) Scan Materials-( ) Links-( ) Others-( )			
<b>INSTRUCTIONAL PROCEDURES:</b>			
<b>Initial Activities:</b> Aural introductory description about physical growth, cry, anger, anxiety, social nature, intellectual, language aspects of child after birth till individual becomes adulthood.			
<b>Developmental Activities:</b>			
Content Analysis	Modes	Teacher's Activities	Student's Activities



<p><b>1) Meaning, Definitions and characteristics of growth</b></p> <p>- Arnold Gassell's definition</p> <p>-Crow and Crow's definition</p> <p>-other's definitions</p>	<p>1) Text 2) Scan material 3) videos 4) links 5) photographs</p>	<p>*explains about meaning and definitions of growth, given by various psychologist using text and scan materials posted on Facebook.</p> <p>*shows various videos posted on Facebook about weight, height, size of physical growth and their quantitative aspects.</p> <p>*tells about searching of many links connected to text, photos, ppt's, videos related to growth on Facebook wall.</p> <p>* asks the student to search any links through Facebook and internet to get characteristics of growth growth</p>	<p>-observes the definitions of growth and listens the meaning of growth.</p> <p>-observes the different videos related to physical growth.</p> <p>-comprehends the usage of different links.</p> <p>-searches the links of videos, photos, ppt's etc. connected to content.</p> <p>-gives answers for features of growth.</p>
<p><b>2) Meaning, Definitions and characteristics of Development</b></p> <p>-Arnold Gassell's definition</p> <p>-Jean Piaget's definition</p> <p>-other's definitions</p>	<p>1) Text 2) Scan material 3) videos 4) links 5) photographs</p>	<p>*aurally asks "What are the features of growth?"</p> <p>*explains about meaning and definitions of development, given by various psychologist using text and scan materials posted on Facebook wall.</p> <p>*shows various videos posted on Facebook wall about emotional, social, intellectual, physical, motor activities and their qualitative and quantitative aspects.</p> <p>*tells about searching of many links connected to text, photos, ppt's, videos related to development on Facebook wall.</p>	<p>-observes the definitions of growth and listens the meaning of development.</p> <p>-observes the different videos related to dimensions of development.</p> <p>-comprehends the content and usage of different links.</p> <p>-searches the links of videos, photos, ppt's etc. connected to content.</p>

3) <b>Differences between growth and development</b>	1) Text 2) Scan material	* asks the student to search any links through Facebook wall and internet to get developmental aspects  *aurally asks "What are the features of development?"  *explains and compares differences between growth and development using text and scan materials  * aurally asks "What are differences between growth and development?"	-names dimensions of development.  -distinguishes the differences between growth and development  -gives answers for features of growth. And development
<b>Concluding Activities:</b> Aurally review the main points of definition and meaning of growth and development, features of growth and development using Facebook mode of instruction.			
<b>Assignments:</b> 1) Analyze the features of growth and development using posts on Facebook. 2) Distinguish between growth and development. 3) Using links to understand the meaning of growth and development of child. 4) Upload the videos and photos related to characteristics of growth and Development of child.			

### 3.8 Data Collection

The data was collected in the first semester of about six months i.e. January to May 2014 of the academic year 2013-14. The working days were from Monday to Saturday and about sixteen periods meant for the content topic: Child Development and Learning to teach. The duration of each period was one hour. Researcher adjusted the periods with the co-operation of staff member in his college whenever necessity arises apart from periods mentioned in the time table. The tools prepared for the study were validated by experts and based on given suggestions changes were incorporated. The tools administered to assess the content i.e. achievement test for pre-test and post-test, scale on Facebook social interactions skills to asses seven categories namely General, Entertainment, Student-Content Dimension, Student-Teacher Dimension, Student-Student Dimension, Dialogue Mode and Tutorial Mode and rating scale to know attitude towards use of Facebook. Before Facebook on line method and conventional method of teaching, pre-test was administered to both the groups. Then the topic: Child Development and Learning was taught to

experimental group using the Facebook method and conventional method to control group. For this purpose content to be taught was analyzed thoroughly and then appropriate techniques chosen accordingly. After that, post-test was administered to students of both control and experimental group. In the post-test experimental student-teachers were assessed with scale on Facebook social interaction skills on seven categories and assessed students' attitude towards use of Facebook using Facebook attitude scale.

### **3.9 Data Analysis**

In the present study, existing or intact groups were involved but treatments were assigned to them randomly and to take care that, Analysis of t-test was used. for a study based on pre-test and post-test control group design, Differences in achievement of gender wise and stream wise analysis of data were also done using t-test. Scale on Facebook social interaction skills was used to assess student-teachers on seven elements of social interaction skills. General, Entertainment, Student-Content Dimension, Student-Teacher Dimension, Student-Student Dimension, Dialogue Mode and Tutorial Mode and rating scale to know attitude towards use of Facebook. Scoring was done accordingly and the corresponding average percentage means of all the elements during each rating was done. Student-teachers attitude towards use of Facebook also assessed using rating scale. The data on students' reaction to attitude scale was analyzed using percentage.

In this chapter sampling procedures, design, and the tools used, details on collection of data and statistical techniques employed for analysis and interpretation of the data.

#### 4.1 Introduction

This chapter deals with analysis and interpretation of data collected. The collected data was subjected to appropriate statistical procedures. Based on these results the hypothesis accepted or rejected. In this chapter are involving analyzing the data, testing the hypothesis and then interpreting results, that is taking decision regarding the rejection or acceptance of the hypotheses. Incase analyses of social interaction skills of B.Ed. student-teachers and attitude towards use of Facebook as an instructional tool percentage analysis was done.

#### 4.1 Analyses of Scale on Social Interaction Skills of B.Ed. Student-Teachers

**Table 1: Consolidated data of effectiveness of teaching through Facebook method on Social Interaction Skills.**

Gender	SA	A	UN	DA	SDA
Male	37.56	54.15	9.02	2.93	1.98
Female	31.12	50.71	8.00	2.05	1.76
Average	34.34	52.43	08.51	02.49	1.87

Table 1 revealed that most of the opinions i.e. 52.43 percent agreed that Facebook based instruction method fostered social interaction skills of student-teachers in educational psychology subject whereas 34.34 percent supported strongly agree, it was found that Facebook as an instructional tool which enhanced the social interaction skills. Whereas the negligible percentage of student-teachers were against to Facebook as instructional tool. This implies that there was effectiveness of social interaction skills of student-teachers when taught through Facebook instruction.

#### 4.2 Item Wise Analyses of Scale on Social Interaction Skills

Item wise analysis of Facebook social interaction skills of B.Ed. student-teachers are done under seven main elements of General, Entertainment, Student-Content Dimension, Student-Teacher Dimension, Student-Student Dimension, Dialogue Mode and Tutorial Mode.

##### 1. General

**Table 2: Facebook access the interaction and collaborate with friends, relatives and others**

Gender		SA%	A%	UN%	DA%	SDA%
		Male	26.64	73.26	0	0
Gender	Female	25.71	74.28	0	0	0
	Total	26.18	73.77	0	0	0
Stream	Arts	14.28	85.71	0	0	0
	Science	59.94	40.00	0	0	0
	Total	37.11	62.86	0	0	0
Grand Total		31.64	68.31	0	0	0

The above table indicated that 26.64% male and 25.71% female student-teachers supported strongly agree the statement Facebook access the interaction and collaborate with friends, relatives and others, whereas 73.26% male and 74.28% female student-teachers agreed the above statement. 14.28% arts and 59.94% science student-teachers reveals strongly agree that Facebook access the interaction and collaborate with friends, relatives and others, 85.71% arts and 40% science student-teachers agreed that Facebook access the interaction and collaborate with friends, relatives and others. 31.64% student-teachers strongly agreed and 68.31% student-teachers agreed i.e. majority of the student-teachers agreed above statement.

**Table 3: Any individual or organization post their pictures, photos, videos, wishes, etc. of different occasions on Facebook wall**

Gender		SA%	A%	UN%	DA%	SDA%
		Male	46.62	53.28	0	0
Gender	Female	31.42	68.57	0	0	0
	Total	39.02	60.92	0	0	0
Stream	Arts	25.71	74.28	0	0	0
	Science	66.66	33.33	0	0	0
	Total	46.18	53.80	0	0	0
Grand Total		42.60	57.36	0	0	0

It is realized from the table: 3 that 46.62% male and 31.42% female student-teachers strongly agreed any individual or organization post their pictures, photos, videos, wishes, etc. of different occasions on Facebook wall where as 53.28% male and 68.57% female student-teachers agreed the same. 25.71% arts and 66.66% science student-teachers given opinion strongly agreed on statement any individual or organization post their pictures, photos, videos, wishes, etc. of different occasions on Facebook wall, 74.28% arts and 33.33% science student-teachers agreed. 42.60% student-teachers opinioned strongly agreed and 57.36% student-teachers given agreed on any individual or organization post their pictures, photos, videos, wishes, etc. of different occasions on Facebook wall. Since majority of the students have reported positively, it can be concluded that any individual or organization post their pictures, photos, videos, wishes, etc. of different occasions on Facebook wall.

**Table 4: New products, advertisements, etc. can be observing through Facebook**

Gender		SA%	A%	UN%	DA%	SDA%
	Male		60.00	33.30	6.66	0
Female		37.14	59.99	2.85	0	0
Total		48.57	46.64	4.75	0	0
Stream	Arts	34.28	65.71	0	0	0
	Science	79.26	26.64	0	0	0
	Total	56.77	46.17	0	0	0
<b>Grand Total</b>		52.67	46.40	0	0	0

The above table: 4 revealed that 34.28% arts and 79.26% science student-teachers strongly agreed that new products, advertisements, etc. can be observing through Facebook where as 65.71% arts and 26.64% science student-teachers agreed the same statement. 60.00% male and 37.14% female student-teachers have the opinion strongly agreed and 33.30% male and 59.99% female student-teachers agreed the statement new products, advertisements, etc. can be observing through Facebook respectively. 52.67% student-teachers strongly agreed and 46.40% student-teachers agreed it. It is interpreted majority of the student-teachers strongly agreed the statement new products, advertisements, etc. can be observing through Facebook.

**Table 5: Political parties/ candidates/organizations propagate their campaign through Facebook**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		39.96	53.28	6.66	0	0
Gender	Female	31.42	51.42	17.14	0	0
	Total	35.69	52.35	11.9	0	0
Stream	Arts	45.71	39.99	14.28	0	0
	Science	13.32	73.26	13.32	0	0
	Total	29.51	56.62	13.8	0	0
Grand Total		32.60	54.48	12.85	0	0

From the table: 5, it is seen 32.60% student-teachers strongly agreed that political parties/ candidates/organizations propagate their campaign through Facebook and majority of student-teachers i.e. 54.48% agreed the same. With respect to gender 39.96% male student-teachers' opinion strongly agreed and 31.42% female agreed the statement just agreed. Whereas 53.28% male and 51.42% female student-teachers agreed that Facebook access the interaction and collaborate with friends, relatives and others. In case stream 45.71% arts stream student-teachers and 13.32% science stream student-teachers strongly agreed the same that Facebook access the interaction and collaborate with friends, relatives and others. Whereas 39.99% arts and 73.26% science student-teachers agree it. This therefore is felt that political parties/candidates/ organizations propagate their campaign through Facebook.

**Table 6: Any person could express his ideology and philosophy on different issues and topics on Facebook**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		33.33	59.94	6.66	0	0
Gender	Female	34.28	54.28	5.71	0	0
	Total	33.80	57.11	6.18	0	0
Stream	Arts	39.99	48.50	11.42	0	0
	Science	26.64	66.66	6.66	0	0
	Total	33.31	57.58	9.04	0	0
Grand Total		34.55	57.34	7.61	0	0

The above table 6 reveals 33.33% male and 34.28% female student-teachers strongly agreed that any person could express his ideology and philosophy on different issues and topics on Facebook, 59.94% male and 54.28% female student-teachers agreed it. Whereas 39.99% arts and 26.64% science student-teachers strongly agreed it, and 48.50% arts and 66.66% science student-teachers agreed the above statement. 34.55% student-teachers strongly agreed the statement and 57.34% student-teachers agreed any person could express his ideology and philosophy on different issues and topics on Facebook. It can be therefore concluded that Facebook access the interaction and collaborate with friends, relatives and others.

## 2. Entertainment

**Table 7: We can make chatting, messaging and video calling**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		53.28	33.33	13.32	0	0
Gender	Female	17.14	54.28	0	8.51	0
	Total	35.21	43.80	6.66	4.25	0
Stream	Arts	13.99	45.70	44.28	0	0
	Science	46.62	53.28	0	0	0
	Total	30.30	49.49	22.14	0	0
Grand Total		32.75	52.64	14.4	0	0

The above table 7 it is known that 53.28% male and 17.14% female student-teachers strongly agreed that we can make chatting, messaging and video calling, 33.33% male and 54.28% female student-teachers agreed same. About 13.99% arts and 46.62% science student-teachers strongly agreed the statement, 45.70% arts and 53.28% science student-teachers agreed that we can make chatting, messaging and video calling. 32.75% student-teachers strongly agreed and 46.64% student-teachers agreed the above statement. A significant proportion of student-teachers therefore agreed that we can make chatting, messaging and video calling.

**Table 8: We can watch, post, link, share and tag any pictures, photos, videos, text, audio etc.**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		52.28	33.30	13.32	0	0
Gender	Female	57.14	39.99	2.85	0	0
	Total	54.71	36.64	8.08	0	0



<b>Stream</b>	<b>Arts</b>	54.28	37.14	8.57	0	0
	<b>Science</b>	73.26	26.64	0	0	13.32
	<b>Total</b>	63.77	31.89	4.28	0	0
<b>Grand Total</b>		59.24	34.26	2.14	0	4.30

59.24% student-teachers strongly agreed and 34.26% student-teachers agreed on statement we can watch, post, link, share and tag any pictures, photos, videos, text, audio etc. according to table 7. 52.28% male and 57.14% female student-teachers strongly agreed whereas 33.30% male and 39.99% female student-teachers agreed same. 54.28% arts and 73.26% science student-teachers strongly agreed that we can watch, post, link, share and tag any pictures, photos, videos, text, audio etc. whereas 37.14% arts and 26.64% science student-teachers agreed the statement. 59.24% student-teachers strongly agreed and 34.26% student-teachers agreed. The findings thus indicate that a significant proportion of students agreed that we can watch, post, link, share and tag any pictures, photos, videos, text, audio etc.

**Table 9: We would upload the pictures, photos, videos, text etc. of any programs or events**

<b>Gender</b>		<b>SA%</b>	<b>A%</b>	<b>UN%</b>	<b>DA%</b>	<b>SDA%</b>
		<b>Male</b>	33.30	53.28	13.32	0
<b>Female</b>		48.56	48.56	2.85	0	0
<b>Total</b>		40.93	50.92	8.08	0	0
<b>Stream</b>	<b>Arts</b>	42.85	48.56	8.57	0	0
	<b>Science</b>	53.28	33.33	0	0	10.32
	<b>Total</b>	48.06	40.94	4.28	0	0
<b>Grand Total</b>		44.49	45.93	6.18	0	3.62

The findings of above table 9 reveals 33.30% male and 48.56% female student-teachers strongly agreed that we would upload the pictures, photos, videos, text etc. of any programs or events, 53.28% male and 48.56% female student-teachers agreed and 42.85% arts and majority 53.28% science student-teachers strongly agreed same, 48.56% arts and 33.33% science student-teachers agreed the same. 44.49% student-teachers strongly agreed and 45.93% student-teachers agreed the statement we would upload the pictures, photos, videos, text etc. of any programs or events.

**Table 10: Important sightseeing, sports, cultural, historical, holy places and countries will be searched through Facebook**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		39.96	46.62	13.32	0	0
Gender	Female	62.85	37.14	0	0	0
	Total	51.40	41.88	6.66	0	0
Stream	Arts	53.14	42.85	17.14	0	0
	Science	66.66	35.33	0	0	0
	Total	59.9	39.09	5.57	0	0
Grand Total		55.65	40.48	3.61	0	0

The data in table 10 it is indicated that a significant number of 62.85% female student-teachers strongly agreed that important sightseeing, sports, cultural, historical, holy places and countries will be searched through Facebook where as 46.62% male student-teachers agreed same. A Majority portion 66.66% science student-teacher strongly agreed that important sightseeing, sports, cultural, historical, holy places and countries will be searched through Facebook, whereas 42.85% arts and 35.33% science student-teachers agreed same statement. 55.65% student-teachers strongly agreed and 40.48% student-teachers agreed. Thus, important sightseeing, sports, cultural, historical, holy places and countries will be searched through Facebook.

**Table 11: We would watch promos of movies, cinemas, ads, products of different companies, videos etc.**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		72.26	26.64	0	0	0
Gender	Female	31.42	62.85	5.71	0	0
	Total	51.84	44.74	2.85	0	0
Stream	Arts	32.18	58.88	5.71	0	0
	Science	53.28	40.00	0	6.66	0
	Total	42.73	49.44	2.85	3.33	0
Grand Total		47.28	47.09	5.7	0	0

From table 11 it can be seen that a large group 72.26% male and 31.42% female student-teachers strongly agreed that we would watch promos of movies, cinemas, ads, products of different

companies, videos etc. A majority 62.85% female student-teacher agreed same. 32.18% arts and 53.28% science student-teachers strongly agreed that we would watch promos of movies, cinemas, ads, products of different companies, videos etc. 44.74% arts and a significant 58.88% science student-teachers agreed. 47.28% student-teachers strongly agreed and 47.09% student-teachers agreed the same statement. Thus findings thus indicate we would watch promos of movies, cinemas, ads, products of different companies, videos etc.

### 3. Student-Content Dimension

**Table 12: Facebook facilitates me easily to learn the difficult deeper understanding concepts of content**

Gender		SA%	A%	UN%	DA%	SDA%
		Male	46.66	53.28	0	0
Gender	Female	45.70	34.28	17.14	2.85	0
	Total	46.18	43.78	8.57	1.42	0
	Arts	50.22	34.28	11.42	2.85	0
Stream	Science	31.22	53.28	13.32	0	0
	Total	40.72	43.28	12.37	1.42	0
	Grand Total	43.45	43.28	10.47	2.84	0

The above table 12 reported that most 51.42% arts and 31.22% science student-teachers strongly agreed that Facebook facilitates me easily to learn the difficult deeper understanding concepts of content, whereas 34.28 arts and 53.28% science student-teachers agreed the statement. 46.66% male and 45.70% female student-teachers strongly agreed about Facebook facilitates me easily to learn the difficult deeper understanding concepts of content, 53.28% male and 34.28% female student-teachers agreed that Facebook facilitates me easily to learn the difficult deeper understanding concepts of content. Whereas 44.27% student-teachers opinioned strongly agree and 43.28% student-teachers agreed as Facebook facilitates me easily to learn the difficult deeper understanding concepts of content. It can be therefore concluded that Facebook facilitates me easily to learn the difficult deeper understanding concepts of content.

**Table 13: I prefer a face-to-face course to a Facebook-based course for learning**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		28.17	66.66	0	4.84	0
Gender	Female	22.85	54.28	22.85	0	0
	Total	25.51	60.47	11.42	2.42	0
Stream	Arts	8.57	45.71	19.99	25.71	0
	Science	26.64	59.94	6.66	6.66	0
	Total	17.60	52.82	13.32	16.18	0
Grand Total		21.55	56.64	12.32	9.30	0

The finding in Table 13 interpreted 21.55% student-teachers strongly agreed and majority 56.64% student-teachers agreed as I prefer a face-to-face course to a Facebook-based course for learning. 28.17% male and 22.85% female student-teachers strongly agreed, whereas 66.66% male and significant portion 54.28% female student-teachers agreed the statement. 8.57% arts and 26.64% science student-teachers strongly agreed whereas, 45.71% arts and 59.94% science student-teachers agreed the statement I prefer a face-to-face course to a Facebook-based course for learning. This implies that majority of student teachers supports the statement I prefer a face-to-face course to a Facebook-based course for learning

**Table 14: I prefer content-sharing in formal and informal education contexts**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		17.98	66.66	13.32	0	0
Gender	Female	23.70	71.42	0	2.85	0
	Total	20.84	69.04	6.66	1.42	0
Stream	Arts	21.85	62.85	11.42	2.85	0
	Science	12.32	86.58	0	0	0
	Total	17.08	74.71	5.71	1.42	0
Grand Total		18.46	71.87	6.18	2.85	0

The above table 14 indicated that a significant portion 62.85% arts and 86.58% science student-teachers agreed. I prefer content-sharing in formal and informal education contexts. 17.98% male and 23.70% female student-teachers strongly agreed the statement whereas 66.66% male and

71.42% female student-teachers just agreed the same 18.46% student-teachers strongly agreed and 71.87% student-teachers agreed as I prefer content-sharing in formal and informal education contexts. The findings thus favorable to the statement I prefer content-sharing in formal and informal education contexts.

**Table 15: Content uploaded on Facebook would be appropriate and reliable is of high value**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		23.62	26.64	26.64	0	0
Gender	Female	12.71	57.14	5.71	5.71	5.71
	Total	18.16	41.89	16.17	2.85	2.85
Stream	Arts	14.57	45.71	25.71	0	0
	Science	13.64	45.71	6.66	6.66	6.66
	Total	14.10	45.71	25.71	3.33	3.33
Grand Total		16.13	56.38	20.94	3.09	3.09

It is understood from the table 15 that 16.13% student-teachers strongly agreed and 56.38% student-teachers agreed as content uploaded on Facebook would be appropriate and reliable is of high value. 23.62% male and 12.71% female student-teachers strongly agreed, 26.64% male and 57.14% female student-teachers agreed the same. 14.57% arts and 13.64% science student-teachers strongly agreed, 45.71% arts and 45.71% science student-teachers agreed that content uploaded on Facebook would be appropriate and reliable is of high value. Therefore, content uploaded on Facebook would be appropriate and reliable is of high value.

**Table 16: I feel the content in the Facebook will be accessed anytime and complement the classroom activities**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		19.98	53.28	26.64	0	0
Gender	Female	34.28	54.28	11.42	0	2.85
	Total	27.13	53.78	19.03	0	1.42
Stream	Arts	31.42	48.56	19.99	0	0
	Science	26.64	59.94	6.66	0	3.90
	Total	29.03	54.25	13.32	0	1.95
Grand Total		28.08	54.01	16.17	0	1.67

The table 16 reported that 19.98% male and 34.28% female student-teachers strongly agreed that I feel content in the Facebook will be accessed anytime and complements the classroom activities, 53.28% male and 54.28% female student-teachers agreed same. 31.42% arts and 26.64% science student-teachers have given opinion strongly agreed, where as 48.56% arts and 59.94% science student-teachers agreed same. 28.08% student-teachers strongly agreed the statement and 54.01% student-teachers agreed and supported I feel content in the Facebook will be accessed anytime and complements the classroom activities.

**Table 17: Content on online before we learn about them in class is productive**

Gender		SA%	A%	UN%	DA%	SDA%
		Male	33.33	66.66	0	0
Gender	Female	32.42	49.56	14.26	2.85	2.85
	Total	32.37	58.11	7.13	1.42	1.42
	Arts	33.33	57.99	11.42	0	0
Stream	Science	32.42	44.00	13.32	0	6.66
	Total	32.37	51.99	12.37	0	6.66
	Grand Total	33.37	50.99	9.75	1.42	3.83

The above table 17 revealed, considering gender aspect 33.33% male and 32.42% female student-teachers strongly agreed that content on online before we learn about them in class is productive, 66.66% male and 49.56% female student-teachers agreed same. 33.33% arts and 32.42% science student-teachers supported strongly agree where as 57.99% arts and 44.00% science student-teachers agreed statement. Whereas 33.37% student-teachers strongly agreed and 50.99% student-teachers agreed as content on online before we learn about them in class is productive. Therefore this implies that a significant number of student-teacher is favoring the statement content on online before we learn about them in class is productive.

**Table 18: I experience a different learning environment formally and informally**

Gender		SA%	A%	UN%	DA%	SDA%
		Male	33.33	33.33	33.33	0
Gender	Female	51.42	39.99	8.51	0	0
	Total	16.66	53.32	20.92	0	0
	Arts	42.85	42.85	14.28	0	0
Stream	Science	59.94	13.32	26.64	0	0
	Total	51.39	28.08	20.46	0	0
	Grand Total	34.02	45.20	20.69	0	0

The table: 18 it is reported that 34.02% student-teachers strongly agreed and 45.20% student-teachers agreed that I experience a different learning environment formally and informally. 33.33% male and a significant proportion 51.42% female student-teacher strongly agreed statement where as 33.33% male and 39.99% female student-teachers agreed statement. 42.85% arts and 59.94% science student-teachers strongly agreed where as 42.85% arts and 13.32% science student-teachers agreed that I experience a different learning environment formally and informally. It is felt that majority of student-teachers supported the statement I experience a different learning environment formally and informally.

**Table 19: Teacher provided me with supplementary materials**

Gender		SA%	A%	UN%	DA%	SDA%
	Male		39.96	53.28	6.66	0
Female		42.85	42.85	14.28	0	0
Total		42.40	48.06	10.47	0	0
Stream	Arts	34.28	28.54	17.14	0	0
	Science	53.28	46.62	0	0	0
	Total	43.78	37.58	8.27	0	0
Grand Total		43.09	42.82	9.52	0	0

The above table 19 findings indicated that in gender aspect 39.96% male and 42.85% female student-teachers strongly agreed the statement-teacher provided me with supplementary materials whereas majority 53.28% male and 42.85% female student-teachers agreed the statement. With respect to stream 34.28% arts and majority proportion 53.28% science student-teachers strongly agreed the same where as 28.54% arts and 46.62% science student-teachers agreed the statement. 43.09% student-teachers strongly agreed and 42.82% student-teachers agreed as teacher provided me with supplementary materials. This implies that most of the student-teachers opinion in favor of the statement-teacher provided me with supplementary materials.

**Table 20: I use the time allotted for the course more efficiently**

Gender		SA%	A%	UN%	DA%	SDA%
		Male	33.33	53.28	13.32	0
Gender	Female	39.99	42.85	17.14	0	0
	Total	36.66	48.06	15.23	0	0
Stream	Arts	51.42	34.28	14.28	0	0
	Science	19.93	59.94	19.98	0	0
	Total	35.67	47.11	17.13	0	0
Grand Total		36.16	47.58	16.18	0	0

It is understood from the above table 20 that concerned to stream a significant proportion 51.42% arts and 19.93% science student-teachers strongly agreed that I use the time allotted for the course more efficiently where as 34.28% arts and 59.94% science student-teachers agreed. 33.33% male and 39.99% female student-teachers strongly agreed. Whereas 53.28% male and 42.85% female student-teachers agreed the statement I use the time allotted for the course more efficiently. 36.16% student-teachers strongly agreed and 47.58% student-teachers agreed as I use the time allotted for the course more efficiently. Therefore, it can be concluded that a significant portion of the students supported that I use the time allotted for the course more efficiently.

**Table 21: I learn things which I do not know and which I do not learn in class either**

Gender		SA%	A%	UN%	DA%	SDA%
		Male	53.67	58.65	13.32	0
Gender	Female	45.71	42.85	11.42	0	0
	Total	49.69	50.75	12.37	0	0
Stream	Arts	26.38	37.42	11.42	0	0
	Science	46.62	40.00	13.32	0	0
	Total	36.50	38.71	11.75	0	0
Grand Total		43.09	44.73	12.06	0	0

From the above table 21 it interprets that 43.09% student-teachers strongly agreed and 44.73% student-teachers agreed that I learn things which I do not know and which I do not learn in class either. With respect to gender element 53.67% male and 45.71% female student-teachers strongly



agreed same, 58.65% male and 42.85% female student-teachers agreed. whereas 26.38% arts stream and 46.62% science stream student-teachers strongly agreed the statement, where as 37.42% arts and 40% science student-teachers agreed. It is revealed that a majority of student-teachers opinioned that I learn things which I do not know and which I do not learn in class either.

#### 4 Student-Teacher Dimensions

**Table 22: Facebook socialize the teachers and students by means formal and informal teaching**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		19.98	45.14	6.66	0	0
Gender	Female	37.14	57.14	2.85	2.85	0
	Total	28.56	59.20	4.75	1.42	0
Stream	Arts	45.38	37.48	5.71	2.85	0
	Science	52.94	40.00	0	0	0
	Total	49.16	49.71	2.85	1.42	0
Grand Total		38.86	54.45	3.8	2.84	0

According to table 22, 19.98% male and 37.14% female student-teachers strongly agreed that Facebook socialize the teachers and students by means formal and informal teaching where as 45.14% male and 57.14% female student-teachers agreed the statement. 49.99% arts and 52.94% science student-teachers strongly agreed, 37.48% arts and 40% science student-teachers agreed it. 37.48% student-teachers strongly agreed and 40.00% student-teachers agreed the statement. Therefore, a significant portion of student-teachers opinioned that Facebook socialize the teachers and students by means formal and informal teaching.

**Table 23: It is an atmosphere where I could deliver and share my ideas with the instructor through online and offline mode.**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		40.00	45.00	50.00	0	0
Gender	Female	35.00	40.00	12.00	0	0
	Total	37.5	42.50	31.00	0	0
Stream	Arts	22.00	58.00	8.57	0	0
	Science	40.00	35.00	13.32	0	0
	Total	31.00	44.50	10.94	0	0
Grand Total		34.25	44.50	20.97	0	0

With respect to stream, 22.00% arts and 40.00% science student-teachers strongly agreed that it is an atmosphere where I could deliver and share my ideas with the instructor through online and offline mode where as 58.00% arts and 35.00% science student-teachers agreed same. In case gender, 40.00% male and 35.00% female student-teachers strongly agreed. Whereas 34.25% male and 40.00% female student-teachers agreed statement. 39.73% student-teachers strongly agreed and 44.50% student-teachers agreed. A significant portion of student-teachers therefore agreed that it is an atmosphere where I could deliver and share my ideas with the instructor through online and offline mode.

**Table 24: I believe teacher should be unapproachable and formal**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		6.66	46.62	19.98	13.32	13.32
Gender	Female	8.57	14.28	34.28	22.85	17.14
	Total	7.61	30.45	27.13	18.08	15.23
	Stream	Arts	14.28	22.85	22.85	28.57
Stream	Science	0	33.33	26.64	13.32	26.64
	Total	7.14	28.09	24.74	20.94	19.03
Grand Total		7.37	29.27	25.93	19.51	17.13

The above table 24 it can however see that 6.66% male and 8.57% female student-teachers strongly agreed that I believe teacher should be unapproachable and formal. 46.62% male and 14.28% female student-teachers agreed where as 14.28% arts and 0% science student-teachers strongly agreed that I believe teacher should be unapproachable and formal, 22.85% arts and 33.33% science student-teachers agreed the same. 7.37% student-teachers strongly agreed and 29.27% student-teachers agreed that I believe teacher should be unapproachable and formal. It can be thus concluded that majority of teacher against to the statement that I believe teacher should be unapproachable and formal.

**Table 25: The informal sharing may damage authority and discipline of instructor**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		0	48.00	39.96	6.66	6.66
Gender	Female	14.28	49.00	28.57	5.70	5.70
	Total	7.14	48.00	34.26	6.18	6.18

<b>Stream</b>	<b>Arts</b>	5.71	45.00	31.42	17.14	2.85
	<b>Science</b>	19.98	40.00	26.64	6.66	13.32
	<b>Total</b>	12.84	42.50	29.03	11.9	8.08
<b>Grand Total</b>		9.99	45.25	31.64	9.04	4.04

With respect to gender, aspect table 25 reported that 0% male and 14.28% female student-teachers strongly agreed that the informal sharing may damage authority and discipline of instructor, 48.00% male and 49.00% female student-teachers agreed same. Whereas in case stream 5.71% arts and 19.98% science student-teachers strongly agreed same. And 19.98% arts and 33.33% science student-teachers agreed the statement. The grand total opinion only 9.99% student-teachers strongly agreed and 45.25% student-teachers agreed and 31.64 undecided that the informal sharing may damage authority and discipline of instructor.

**Table 26: It is beneficial in terms of interaction with the teacher**

<b>Gender</b>		<b>SA%</b>	<b>A%</b>	<b>UN%</b>	<b>DA%</b>	<b>SDA%</b>
		<b>Male</b>	46.62	53.28	0	0
<b>Female</b>		45.70	51.42	0	0	2.85
<b>Total</b>		46.16	52.35	0	0	1.42
<b>Stream</b>	<b>Arts</b>	42.85	47.14	0	0	0
	<b>Science</b>	59.94	45.32	0	0	6.66
	<b>Total</b>	51.39	46.23	0	0	3.33
<b>Grand Total</b>		48.77	49.29	0	0	1.66

The data of table 26 showed that 46.62% male and 45.70% female student-teachers strongly agreed the statement it is beneficial in terms of interaction with the teacher, majority of gender 53.28% male and 51.42% female student-teachers agreed. 42.85% arts and majority 59.94% science stream student-teachers strongly agreed and, 47.14% arts and 45.32% science student-teachers agreed for given statement. Total 48.77% student-teachers strongly agreed and 49.29% student-teachers agreed that it is beneficial in terms of interaction with the teacher.

**Table 27: I have the opportunities to ask what I do not understand in class**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		19.98	80.00	0	0	0
Gender	Female	51.42	37.14	11.42	0	0
	Total	35.70	58.57	5.71	0	0
Stream	Arts	34.28	57.14	8.57	0	0
	Science	73.26	26.64	0	0	0
	Total	53.77	41.89	4.28	0	0
Grand Total		44.73	50.23	4.99	0	0

The above table 27 reported that 44.73% student-teachers strongly agreed and 50.23% student-teachers agreed the statement I have the opportunities to ask what I do not understand in class. 19.98% male and 51.42% female student-teachers strongly agreed and 80.00% male and 37.14% female student-teachers agreed same. Considering the gender aspect 34.28% arts and 73.26% science student-teachers strongly agreed the above statement, whereas 57.14% arts and 26.64% science student-teachers agreed that I have the opportunities to ask what I do not understand in class. The findings clearly supported that I have the opportunities to ask what I do not understand in class.

**Table 28: I observe teaching content through Facebook is more interesting than traditional type of learning.**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		39.96	46.20	0	0	0
Gender	Female	48.44	48.56	17.14	2.85	0
	Total	44.20	47.38	8.57	1.42	0
Stream	Arts	25.71	62.85	11.42	0	0
	Science	53.28	26.64	13.32	6.66	0
	Total	44.48	44.74	5.71	3.33	0
Grand Total		44.34	46.06	7.14	2.37	0

It could be seen from the table 28 that 25.71% arts and majority 53.28% science student-teachers strongly agreed the statement that I observe teaching content through Facebook is more

interesting than traditional type of learning. In gender case 39.96% male and 48.44% female student-teachers strongly agreed and majority 46.20% male and 48.56% female student-teachers agreed for given statement where as a significant portion 62.85% arts and 26.64% science stream student-teachers agreed same. 44.34% student-teachers strongly agreed and 46.06% student-teachers agreed for the above statement. Thus it can be concluded that majority of student-teachers in favor of the statement I observe teaching content through Facebook is more interesting than traditional type of learning.

**Table 29: I discuss content of Facebook online as well as in classroom.**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		19.98	73.26	6.66	0	0
Gender	Female	28.57	54.28	11.42	5.70	0
	Total	24.27	63.77	9.04	2.85	0
Stream	Arts	19.99	68.56	5.71	5.71	0
	Science	40.00	46.62	13.32	0	0
	Total	29.99	57.59	9.51	2.85	0
Grand Total		27.13	60.68	9.27	2.85	0

The above table 29 reveals 19.98% male and 28.57% female student-teachers strongly agreed that I discuss content of Facebook online as well as in classroom, 73.26% male and 54.28% female student-teachers agreed. 19.99% arts and 40.00% science student-teachers strongly agreed where as 68.56% arts and 46.62% science student-teachers agreed that I discuss content of Facebook online as well as in classroom. The sum 27.13% student-teachers strongly agreed and 60.68% student-teachers agreed, this shows that I discuss content of Facebook online as well as in classroom. It can be seen that majority of student teachers goes with the statement I discuss content of Facebook online as well as in classroom.

**Table 30: I enjoy cooperating with teacher**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		19.98	80.00	0	0	0
Gender	Female	39.99	48.57	11.42	0	0
	Total	29.98	64.28	5.71	0	0

<b>Stream</b>	<b>Arts</b>	22.85	71.45	4.05	0	0
	<b>Science</b>	59.94	40.00	0	0	0
	<b>Total</b>	41.39	55.72	2.02	0	0
<b>Grand Total</b>		35.68	60.00	3.86	0	0

The data of the table 20 reported that 35.68% student-teachers in favor of strongly agree and 60.00% in favor of agree for the statement I enjoy cooperating with teacher. 19.98% male and 39.99% female student-teachers strongly agreed and 80.00% male and 48.57% female agreed whereas about stream 22.85% arts and 59.94% science student-teachers strongly agreed for the given statement. Finally, 71.45% arts and 40% science student-teachers agreed that I enjoy cooperating with teacher. Therefore it can be concluded that most of the opinion in favor of the statement I enjoy cooperating with teacher.

**Table 31: It promotes respect, self-esteem and self-confidence**

<b>Gender</b>		<b>SA%</b>	<b>A%</b>	<b>UN%</b>	<b>DA%</b>	<b>SDA%</b>
		<b>Male</b>	33.33	66.66	0	0
<b>Female</b>		42.85	54.28	2.85	0	0
	<b>Total</b>	38.09	60.47	1.42	0	0
<b>Stream</b>	<b>Arts</b>	17.14	71.42	11.42	0	0
	<b>Science</b>	79.92	19.98	0	0	0
	<b>Total</b>	48.53	45.70	5.71	0	0
<b>Grand Total</b>		43.31	53.08	3.56	0	0

According to table 31, 33.33% male and 42.85% female student-teachers strongly agreed statement it promotes respect, self-esteem, self-confidence, 66.66% male, and 54.28% female student-teachers agreed for the statement. 17.14% arts and a majority 79.92% science stream student-teachers favoring strongly agreed and a significant portion 71.42% arts and 19.98% science student-teachers favoring agreed for the given statement. 43.31% student-teachers strongly agreed and 53.08% student-teachers agreed the statement it promotes respect, self-esteem and self-confidence. This implies that student-teachers favoring the statement It promotes respect, self-esteem and self-confidence.

5 Student-Student Dimensions

**Table 32: It promotes me to interact with all the members of the class about study**

Gender		SA%	A%	UN%	DA%	SDA%
		Male	33.33	66.66	0	0
Gender	Female	48.56	45.70	5.71	0	0
	Total	40.94	56.18	2.88	0	0
	Arts	37.14	59.49	2.85	0	0
Stream	Science	53.28	40.00	6.66	0	0
	Total	45.21	49.74	4.75	0	0
	Grand Total	43.07	52.96	3.81	0	0

From the above table 32 it reveals that 43.07% student-teachers strongly agreed and 52.96 % student-teachers agreed the statement it promotes me to interact with all the members of the class about study. 33.33% male and 48.56% female strongly agreed and a majority proportion 66.66% male and 45.70% female agreed that it promotes me to interact with all the members of the class about study where as 37.14% arts stream and 53.28% science student-teachers and 59.49% arts and 40% science student-teachers agreed statement. It is therefore found that a significant proportion of the students agreed on statement.

**Table 33: Students can follow videos, ppt's pictures etc. posted by others**

Gender		SA%	A%	UN%	DA%	SDA%
		Male	47.20	39.96	6.66	0
Gender	Female	50.42	34.28	5.70	2.85	5.70
	Total	48.81	37.12	6.18	1.42	0
	Arts	42.85	40.00	8.57	2.85	5.71
Stream	Science	66.66	33.33	0	0	0
	Total	45.75	36.66	4.28	1.42	0
	Grand Total	50.33	36.89	5.23	1.42	5.71

Table 33 reported that 47.20% male and 50.42% female student-teachers strongly agreed that students can follow videos, ppt's pictures etc. posted by others, 39.96% male and 34.28% female

student-teachers agreed it and with respect to stream 42.85% arts and a significant proportion 66.66% science student-teachers strongly agreed the same where as 40.00% arts and 33.33% science student-teachers agreed that students can follow videos, ppt's pictures etc. posted by others. 53.33% student-teachers strongly agreed and 36.89% student-teachers agreed. Since majority of students support same and students can follow videos, ppt's pictures etc. posted by others.

**Table 34: I feel it develops productive behavior of students**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		46.62	53.28	0	0	0
Gender	Female	31.42	51.42	8.57	5.70	2.85
	Total	39.02	52.35	4.28	2.85	2.85
	Arts	37.14	45.71	5.71	8.57	0
Stream	Science	40.00	40.00	6.66	6.66	2.66
	Total	38.57	42.85	6.18	7.61	1.33
	Grand Total	38.79	47.60	6.42	5.23	3.34

It is revealed from the above table 34 that with respect to stream 37.14% arts and 40.00% science student-teachers strongly agreed that I feel it develops productive behavior of students and 45.71% arts stream and 40.00% science student-teachers agreed and with respect to gender 46.62% male and 31.42% female student-teachers strongly agreed the statement and 53.28% male and 51.42% female student-teachers agreed it. 38.79% student-teachers strongly agreed and 47.60% student-teachers agreed that I feel it develops productive behavior of students. It can be thus concluded that majority of student-teachers in favor of statement I feel it develops productive behavior of students.

**Table 35: Our friends provide me with supplementary material**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		33.33	53.28	13.32	0	0
Gender	Female	28.59	57.14	14.28	0	0
	Total	30.96	55.21	13.80	0	0
	Arts	22.85	71.42	5.71	0	0
Stream	Science	40.00	53.28	6.66	0	0
	Total	31.42	62.35	6.18	0	0
	Grand Total	31.19	58.78	9.99	0	0



The findings of the table 35 indicated that 33.33% male and 28.59% female student-teachers favoring the strongly agreed statement our friends provide me with supplementary material and majority of 53.28% male and 57.14% female student-teachers agreed it, where as 22.85% arts and 40.00% science student-teachers strongly agreed and 71.42% arts and 53.28% science student-teachers agreed that our friends provide me with supplementary material. 31.19% student-teachers strongly agreed and 58.78% student-teachers agreed the statement our friends provide me with supplementary material. Therefore, it is interpreted that a significant proportion of student-teachers in favor of the statement our friends provide me with supplementary material

**Table 36: It is beneficial in terms of meeting new students**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		66.66	33.33	0	0	0
Gender	Female	27.50	68.57	5.70	0	0
	Total	47.08	50.00	2.85	0	0
	Stream	Arts	25.71	69.00	5.71	0
Science		53.28	46.60	0	0	0
Total		39.49	57.80	2.85	0	0
Grand Total		43.28	53.90	2.85	0	0

The above table 36 reveals 25.71% arts stream student-teachers and a significant proportion 53.28% science student-teacher strongly agreed that it is beneficial in terms of meeting new students and 69.00% arts and 46.62% science student-teachers agreed on it. Whereas 66.66% male and 27.50% female student-teachers strongly agreed and 33.33% male and 68.57% female student-teachers agreed for the above statement. 43.28% student-teachers strongly agreed and 54.51% student-teachers agreed that it is beneficial in terms of meeting new students. It implies that majority of opinions were not against to the statement it is beneficial in terms of meeting new students.

**Table 37: Communication with my classmates help to motivate learning**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		39.96	59.94	0	0	0
Gender	Female	34.28	50.82	2.85	0	0
	Total	37.12	55.38	1.42	0	0

<b>Stream</b>	<b>Arts</b>	20.00	65.51	24.42	0	0
	<b>Science</b>	66.46	33.33	0	0	0
	<b>Total</b>	43.33	45.42	12.21	0	0
<b>Grand Total</b>		40.02	52.40	6.81	0	0

The above table 37 interprets that 39.96% male and 34.28% female student-teachers strongly agreed that communication with my classmates help to motivate learning, a significant proportion in both gender 59.94% male and 50.82% female student-teachers agreed it. With respect to stream, majority opinion in favor i.e. 66.66% science student-teachers strongly agreed and 65.51% arts and 33.33% science student-teachers agreed the statement. Therefore, 40.22% student-teachers strongly agreed and 52.40% student-teachers agreed. Since majority of student-teachers were in support of statement, it can be said that communication with my classmates help to motivate learning.

**Table 38: Facebook brings students who share common interests together**

<b>Gender</b>		<b>SA%</b>	<b>A%</b>	<b>UN%</b>	<b>DA%</b>	<b>SDA%</b>
		<b>Male</b>	39.96	59.94	0	0
<b>Female</b>		37.14	51.42	11.42	0	0
	<b>Total</b>	38.55	55.68	5.71	0	0
<b>Stream</b>	<b>Arts</b>	37.14	54.28	8.57	2.85	0
	<b>Science</b>	40.00	46.62	13.32	0	0
	<b>Total</b>	38.57	50.45	10.94	1.42	0
<b>Grand Total</b>		38.56	53.06	5.47	1.93	0

From the data of table 38, it is understood that 38.56% student-teachers strongly agreed and 53.06% student-teachers agreed for Facebook brings students who share common interests together. 39.96% male and 37.14% female student-teachers strongly agreed and 59.94% male and 51.42% female student-teachers agreed. Whereas 37.14% arts and 40.00% science student-teachers in favor of strongly agreed and 54.28% arts and 46.62% science student-teachers agreed the statement. This implies that a significant proportion of student-teachers supported the statement Facebook brings students who share common interests together.

**Table 39: Facebook helps to contribute everybody's own ideas with other students**

Gender		SA%	A%	UN%	DA%	SDA%
		Male	33.33	59.94	6.66	0
Gender	Female	62.85	37.14	0	0	0
	Total	48.09	48.54	3.33	0	0
Stream	Arts	37.14	50.20	8.57	5.71	0
	Science	86.58	10.32	0	0	0
	Total	61.86	30.25	4.28	2.85	0
Grand Total		53.93	39.4	3.80	2.85	0

The above table 39 reveals 33.33% male and 62.85% female student-teachers strongly agreed the statement Facebook helps to contribute everybody's own ideas with other students and majority 59.94% male and 37.14% female student-teachers agreed whereas 37.14% arts and 86.58% science student-teachers strongly agreed and 50.20% arts and 10.32% science student-teachers agreed it. 54.97% student-teachers strongly agreed and 39.40% student-teachers agreed that Facebook helps to contribute everybody's own ideas with other students. Thus, it is concluded that Facebook helps to contribute everybody's own ideas with other students.

**Table 40: Facebook makes everyone independent learner**

Gender		SA%	A%	UN%	DA%	SDA%
		Male	26.64	46.62	13.32	13.32
Gender	Female	34.28	45.71	17.14	2.85	0
	Total	30.46	46.16	15.23	8.08	0
Stream	Arts	20.00	51.42	20.00	8.57	0
	Science	59.94	40.00	0	0	0
	Total	39.97	45.71	10	4.28	0
Grand Total		35.21	45.93	12.61	6.18	0

It is clear from the table 40, opinion about stream 20.00% arts and 59.94% science student-teachers strongly agreed the statement Facebook makes everyone independent learner and a significant proportion 51.42% arts and 40% science student-teachers agreed. 26.64% male and 34.28% female student-teachers strongly agreed and 46.62% male and 45.71% female student-

teachers agreed it. 35.21% student-teachers strongly agreed and 45.93% student-teachers agreed Facebook makes everyone independent learner. This therefore revealed that Facebook makes everyone independent learner.

**Table 41: Enjoy cooperating with team members**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		19.98	71.26	6.66	0	0
Gender	Female	39.99	55.75	0	0	2.85
	Total	29.98	63.50	3.33	0	1.42
Stream	Arts	34.28	61.85	2.85	0	0
	Science	33.33	60.25	6.66	0	0
	Total	33.80	61.00	4.75	0	0
Grand Total		31.89	62.29	4.04	0	1.42

The table 41 indicates 31.89% student-teachers strongly agreed and major proportion 63.29% student-teachers agreed on the statement enjoy cooperating with team members. 19.98% male and 39.99% female student-teachers strongly agreed and 73.26% male and 57.14% female student-teachers agreed that enjoy cooperating with team members. 34.28% arts and 33.33% science student-teachers strongly agreed same. 62.85% arts and 59.94% science student-teachers agreed that enjoy cooperating with team members. The findings thus reported that majority of opinions in favor of enjoy cooperating with team members.

## 6 Dialogue Modes

**Table 42: Content learnt through different modes is informative**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		33.33	66.66	0	0	0
Gender	Female	22.85	77.14	0	0	0
	Total	28.09	71.90	0	0	0
Stream	Arts	20.00	60.08	2.85	17.14	0
	Science	19.98	59.50	0	0	0
	Total	19.99	59.80	1.44	8.57	0
Grand Total		24.04	65.83	1.44	8.57	0

The above table 42 reveals 33.33% male and 22.85% female student-teachers strongly agreed the statement content learnt through different modes is informative, 66.66% male and 77.14% female student-teachers agreed it. 20.00% arts and 19.98% science student-teachers strongly agreed and 60.00% arts and 79.52% science student-teachers agreed the statement. Whereas 24.04% student-teachers strongly agreed and 70.83% student-teachers agreed. A significant proportion of student-teachers agreed that content learnt through different modes is informative.

**Table 43: Chat box and video calling encourages for discussion, to clear doubts**

Gender		SA%	A%	UN%	DA%	SDA%
		Male	46.62	39.96	13.32	0
Gender	Female	42.85	45.70	8.51	2.85	0
	Total	44.73	42.83	10.91	1.42	0
	Arts	31.42	54.28	14.28	0	0
Stream	Science	46.62	46.62	0	6.66	0
	Total	39.02	50.14	7.14	3.33	0
	Grand Total	41.87	46.48	9.02	2.37	0

The findings in the table 43 indicate that with respect to stream 31.42% arts and 46.62% science student-teachers strongly agreed that chat box and video calling encourages for discussion, to clear doubts and 39.96% arts and 45.70% science student-teachers agreed the same. Among gender 46.62% male and 42.85% female student-teachers strongly agreed and 39.96% male and 45.70% female student-teachers agreed that chat box and video calling encourages for discussion, to clear doubts. 41.87% student-teachers strongly agreed and 46.48% student-teachers agreed it. This implies that majority of student-teachers given opinion in favor of statement chat box and video calling encourages for discussion, to clear doubts

**Table 44: I comment on videos, text, ppt, notes etc., which motivated me to give responses**

Gender		SA%	A%	UN%	DA%	SDA%
		Male	39.96	57.94	0	0
Gender	Female	25.71	37.60	5.70	0	2.85
	Total	32.83	48.77	2.85	0	2.85
	Stream	Arts	31.42	60.00	2.85	0

	<b>Science</b>	46.64	51.94	6.66	0	6.66
	<b>Total</b>	39.03	55.97	4.75	0	0
<b>Grand Total</b>		35.93	57.39	3.80	0	1.75

The opinions from the data 35.93% student-teachers strongly agreed and 57.39% student-teachers agreed that I comment on videos, text, ppt, notes etc., which motivated me to give responses as given in the table 43. 39.96% male and 25.71% female student-teachers strongly agreed and 59.94% male and 37.60% female student-teachers agreed whereas 31.42% arts and 46.64% science student-teachers strongly agreed it. 60.00% arts and majority 59.94% science student-teachers agreed that I comment on videos, text, ppt, notes etc., which motivated me to give responses. From the obtained data, it is concluded that I comment on videos, text, ppt, notes etc., which motivated me to give responses.

**Table 45: I upload texts, pictures, photos videos, and ppt. etc. and got the responses on it**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		39.96	59.94	0	0	0
Gender	Female	45.70	45.70	8.57	0	0
	Total	42.83	52.82	4.28	0	0
Stream	Arts	45.71	45.71	8.57	0	0
	Science	40.00	59.94	0	0	0
	Total	42.85	52.82	4.28	0	0
<b>Grand Total</b>		42.84	52.82	4.28	0	0

The data obtained from table 45 reveals 45.71% arts and 40.00% science student-teachers strongly agreed that I upload texts, pictures, photos, videos and ppt. etc. and got the responses on it and 45.71% arts and 59.94% science student-teachers agreed on the statement. Whereas 39.96% male and 45.70% female student-teachers strongly agreed and 59.94% male and 45.70% female student-teachers just agreed statement. The table 46 finalizes that 42.84% student-teachers strongly agreed and 52.82% student-teachers agreed. Therefore, it is said using data that I upload texts, pictures, photos, videos and ppt. etc. and got the responses on it.

**Table 46: It has user friendly operation to exchange the views**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		19.98	38.99	0	0	0
Gender	Female	31.42	36.97	8.57	0	0
	Total	25.70	37.98	4.27	0	0
Stream	Arts	20.85	74.28	2.85	0	0
	Science	46.62	40.00	13.32	0	0
	Total	66.62	57.14	8.05	0	0
Grand Total		46.16	44.56	6.16	0	0

The data given in the table 46 implies that 19.98% male and 31.42% female student-teachers strongly agreed that it has user friendly operation to exchange the views, 38.99% male and 36.97% female student-teachers agreed and 20.85% arts stream and 37.98% science stream student-teachers strongly agreed statement whereas 74.28% arts and 40% science student-teachers agreed the statement. 46.16% student-teachers strongly agreed and 63.56% student-teachers agreed that it has user friendly operation to exchange the views. Thus, the findings are in favor of the statement it has user friendly operation to exchange the views.

**7. Tutorial Modes**

**Table 47: Facebook provides comprehension through reading, watching and listening**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		33.33	66.66	0	0	0
Gender	Female	52.27	39.99	5.70	0	0
	Total	42.85	53.32	2.85	0	0
Stream	Arts	58.79	48.56	5.71	0	0
	Science	52.20	46.64	6.66	0	0
	Total	55.85	47.60	6.18	0	0
Grand Total		48.00	47.12	4.51	0	0

The findings reveals that 58.79% arts and a significant proportion of 52.20% science student-teachers strongly agreed that Facebook provides comprehension through reading, watching and

listening where as 48.56% arts and a majority 46.64% science student-teachers agreed the statement. With respect to gender aspect 33.33% male and 52.27% female student-teachers strongly agreed, 66.66% male and 39.99% female student-teachers agreed. Whereas 49.99% student-teachers strongly agreed and 47.12% student-teachers agreed, that Facebook provides comprehension through reading, watching and listening.

**Table 48: Instruction through different modes like video, ppt, text, etc. is effective**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		46.62	53.28	0	0	0
Gender	Female	45.70	42.85	11.42	0	0
	Total	46.16	48.05	5.71	0	0
Stream	Arts	31.42	43.46	14.28	2.85	0
	Science	53.48	42.44	0	0	0
	Total	42.45	47.60	7.14	1.42	0
Grand Total		44.30	44.30	6.42	1.42	0

From the table 48, data related to gender 46.62% male and 45.70% female student-teachers strongly agreed that Instruction through different modes like video, ppt, text, etc is effective and a significant portion 53.28% male and 42.85% female student-teachers agreed. Related to stream 31.42% arts and majority 43.46% science student-teachers strongly agreed the statement whereas 48.56% arts and 46.64% science student-teachers agreed. The grand total data 44.30% student-teachers strongly agreed and 47.85% student-teachers agreed for statement. The analysis of the findings in favor of Instruction through different modes like video, ppt, text, etc. is effective.

**Table 49: PPT, PDF, files and Notes are informative and comprehensive**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		33.33	59.94	6.66	0	0
Gender	Female	37.14	39.99	19.99	2.85	0
	Total	35.23	49.96	13.32	1.42	0
Stream	Arts	22.85	48.56	25.71	2.85	0
	Science	59.94	33.33	6.66	0	0
	Total	41.39	40.94	16.18	1.42	0
Grand Total		38.31	45.45	14.75	1.42	0



The above table 49 reveals the grand total 38.31% student-teachers strongly agreed and 45.45% student-teachers agreed for the statement ppt., pdf files and notes are informative and comprehensive. 33.33% male and 37.14% female student-teachers strongly agreed and a significant proportion of gender 59.94% male and 39.99% female student-teachers agreed whereas in stream 22.85% arts and majority 59.94% science student-teachers strongly agreed and 48.56% arts and 33.33% science student-teachers agreed that ppt., pdf files and notes are informative and comprehensive. Thus, it is concluded that majority of opinions are in favor of the statement ppt., pdf files and notes are informative and comprehensive.

**Table 50: Videos supports concrete examples of various concepts are appropriate and reliable**

		SA%	A%	UN%	DA%	SDA%
<b>Gender</b>	<b>Male</b>	46.62	53.28	0	0	0
	<b>Female</b>	39.99	48.56	11.42	0	0
	<b>Total</b>	43.30	50.92	5.71	0	0
<b>Stream</b>	<b>Arts</b>	40.00	54.28	5.71	0	0
	<b>Science</b>	46.62	46.62	6.66	0	0
	<b>Total</b>	43.31	50.45	6.18	0	0
<b>Grand Total</b>		43.30	50.68	5.94	0	0

The above table 50 interprets about stream 14.28% arts and a significant 59.94% science student-teacher strongly agreed that videos supports concrete examples of various concepts are appropriate and reliable and 85.71% arts and 40% science student-teachers agreed. With respect to gender aspect 26.64% male and 25.71% female student-teachers strongly agreed, majority proportion 73.26% male and 74.28% female student-teachers agreed. The grand total data 31.64% student-teachers strongly agreed and 68.31% student-teachers agreed that videos supports concrete examples of various concepts are appropriate and reliable. This therefore reveals that a majority of opinions supported that videos supports concrete examples of various concepts are appropriate and reliable.

**Table 51: Facebook mode is the only platform for high value of motivation**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		33.33	66.66	0	0	0
Gender	Female	48.56	34.28	8.57	5.70	2.85
	Total	38.94	50.47	4.28	2.85	1.42
Stream	Arts	45.71	45.71	2.85	2.71	0
	Science	33.33	40.00	13.32	6.66	6.66
	Total	37.23	42.85	8.08	4.68	3.33
Grand Total		38.08	46.66	6.18	3.76	4.99

The findings in the table 51 reveals, among gender aspect 33.33% male and 48.56% female student-teachers strongly agreed that Facebook mode is the only platform for high value of motivation and majority 66.66% male and 34.28% female student-teachers agreed it. Whereas with respect to stream 45.71% arts and 33.33% science student-teachers strongly agreed and 45.71% arts and 40% science student-teachers agreed the same. 40.23% student-teachers strongly agreed and 46.66% student-teachers agreed that Facebook mode is the only platform for high value of motivation. Thus, a significant proportion of student-teachers therefore agreed that Facebook mode is the only platform for high value of motivation.

**4.3 Analyses of B.Ed. Student-Teachers' Attitude towards Use of Facebook as an Instructional Tool.**

**Table-52 Consolidated data of effectiveness of teaching through Facebook on attitude towards use of Facebook**

Gender	SA	A	UN	DA	SDA
Male	24.78	45.52	13.79	10.06	5.08
Female	26.44	47.68	12.48	10.08	4.64
Average	25.61	46.6	13.135	10.46	4.86

The table reported that effectiveness of teaching through Facebook method on attitude towards use of Facebook among student-teachers was stated 46.6 and 25.61 percent of the responses are in favor of agreed and strongly agree respectively. It interpreted a significant number of student-teachers expressed that Facebook as instructional tool which developed positive attitude towards

use of Facebook. Thus, majority student-teachers there were effectiveness of teaching through Facebook on attitude towards use of Facebook.

#### 4.4 Itemwise Analyses of B.Ed. Student-Teachers Attitude towards Use of Facebook as an Instructional Tool.

**Table 53: I feel interacting with Facebook features are enjoyable**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		66.66	33.33	0	0	0
Gender	Female	42.85	57.14	0	0	0
	Total	54.75	45.23	0	0	0
Stream	Arts	39.99	57.14	2.85	0	0
	Science	60.00	40.00	0	0	0
	Total	49.99	48.57	1.42	0	0
Grand Total		52.37	46.90	0.71	0	0

The table 53 reveals 66.66% male and 42.85% female student-teachers strongly agreed that I feel interacting with Facebook features are enjoyable, among gender related aspect 33.33% male and a significant 57.14% female student-teachers agreed. Whereas incase stream related 39.99% arts and majority 60.00% science student-teachers strongly agreed the given statement and 57.14% arts and 40% science student-teachers agreed. The grand total data shows 52.37% student-teachers strongly agreed and 46.90% student-teachers agreed that Facebook access the interaction and collaborate with friends, relatives and others. Since majority of the students were in support of the statement it can be said that I feel interacting with Facebook features are enjoyable.

**Table 54: I opinion Facebook can allow me to search interesting and imaginative work**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		40.00	53.33	6.66	0	0
Gender	Female	42.85	51.42	5.71	0	0
	Total	41.42	52.37	6.18	0	0
Stream	Arts	39.99	51.42	8.57	0	0
	Science	40.00	53.21	4.28	0	0
	Total	39.99	52.21	6.42	0	0
Grand Total		40.70	52.29	6.30	0	0

The findings shown in table 54 reported that 39.99% arts and 40.00% science student-teachers strongly agreed that I opinion Facebook can allow me to search interesting and imaginative work. 51.42% arts and major proportion stream 53.21% science student-teachers agreed it. 40.00% male and 42.85% female student-teachers strongly agreed the same. Whereas 53.33% male and 51.42% female student-teachers agreed. Grand total data interprets 40.70% student-teachers strongly agreed and 57.85% student-teachers agreed on statement I opinion Facebook can allow me to search interesting and imaginative work. This implies that majority of the student-teachers agreed the statement I opinion Facebook can allow me to search interesting and imaginative work.

**Table 55: I feel Interacting Facebook make me possible to work more productively.**

Gender		SA%	A%	UN%	DA%	SDA%
		Male	26.66	66.66	6.66	0
Gender	Female	17.14	65.70	14.28	2.85	0
	Total	21.90	66.18	10.47	1.42	0
	Arts	17.14	65.71	14.28	2.85	0
Stream	Science	20.00	66.66	13.33	0	0
	Total	18.57	66.18	13.80	1.42	0
	Grand Total	20.23	66.18	12.13	1.42	0

It is understood from the table 55 that 20.23% student-teachers in favor of strongly agreed and majority 66.18% student-teachers agreed to the statement I feel Interacting Facebook make me possible to work more productively. Among gender 26.66% male and 17.14% female student-teachers strongly agreed and 66.66% male and 65.70% female student-teachers agreed the statement. In case stream 17.14% arts and 20.00% science student-teachers strongly agreed the given statement and 65.71% arts and 66.66% science student-teachers agreed. It can be however seen that a significant proportion of the student-teachers supported the statement I feel Interacting Facebook make me possible to work more productively.

**Table 56: Facebook make me feel uncomfortable when features are not accessed properly**

Gender		SA%	A%	UN%	DA%	SDA%
		Male	19.99	66.66	13.33	0
Gender	Female	31.42	54.28	11.42	2.85	0
	Total	25.70	60.47	12.37	1.42	0

<b>Stream</b>	<b>Arts</b>	28.57	51.42	14.28	2.85	0
	<b>Science</b>	33.33	60.00	6.66	1.42	0
	<b>Total</b>	30.95	55.71	10.47	1.42	0
<b>Grand Total</b>		28.32	58.09	11.42	1.42	0

Table 56 indicates that 28.32% student-teachers strongly agreed and a significant proportion 58.09% student-teacher agreed that Facebook make me feel uncomfortable when features are not accessed properly whereas 19.99% male and 31.42% female student-teachers strongly agreed it. A majority 66.66% male and 54.28% female student-teacher agreed. With respect to stream 28.57% arts and 33.33% science student-teachers strongly agreed and 51.42% arts and a significant 60.00% science student-teacher agreed that Facebook make me feel uncomfortable when features are not accessed properly. Thus, it is concluded that Facebook make me feel uncomfortable when features are not accessed properly.

**Table 57: I interact through content related links of videos, ppts, texts, pdfs' etc., on Facebook wall.**

<b>Gender</b>		<b>SA%</b>	<b>A%</b>	<b>UN%</b>	<b>DA%</b>	<b>SDA%</b>
		<b>Male</b>	33.20	40.00	13.00	13.00
<b>Female</b>		42.85	45.71	2.85	11.42	0
	<b>Total</b>	38.02	42.85	7.92	12.21	0
<b>Stream</b>	<b>Arts</b>	28.60	48.36	11.42	11.20	0
	<b>Science</b>	60.00	33.33	0	6.00	0
	<b>Total</b>	44.00	40.84	5.71	8.6	0
<b>Grand Total</b>		41.01	41.84	6.81	10.40	0

The data table 57 indicates about gender aspect that 33.33% male and 42.85% female student-teachers strongly agreed that I interact through content related links of videos, ppts, texts, pdfs' etc, on Facebook wall and 40.00% male and 45.71% female student-teachers agreed it. Considering stream 48.56% arts and 33.33% science student-teachers strongly agreed and 28.57% arts and 60.00% science student-teachers agreed the same. Whereas 41.18% student-teachers strongly agreed and 41.89% student-teachers agreed for given statement. This therefore reveals that I interact through content related links of videos, ppts, texts, pdfs' etc, on Facebook wall.

**Table 58: I feel Facebook motivate users to comment on more posts and sharing**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		8.41	19.04	2.14	0	0
Gender	Female	10.10	11.04	3.20	0	0
	Total	18.51	30.00	5.34	0	0
Stream	Arts	11.55	9.31	1.0	2.85	0
	Science	5.40	20.30	1.01	0	0
	Total	16.95	29.61	2.01	1.42	0
Grand Total		31.53	59.70	7.35	1.42	0

The findings of table 58 reveals about stream, 39.99% arts and 26.66% science student-teachers strongly agreed that I feel Facebook motivate users to comment on more posts and sharing and 45.71% arts and a significant proportion 73.33% science student-teachers agreed whereas in case gender aspect 13.33% male and 48.56% female student-teachers strongly agreed the same, a majority opinion 80.00% male and 39.99% female student-teachers agreed that I feel Facebook motivate users to comment on more posts and sharing. 31.63% student-teachers strongly agreed and 59.75% student-teachers agreed that I feel Facebook motivate users to comment on more posts and sharing. It is therefore can be seen that a significant proportion of students in favor of I feel Facebook motivate users to comment on more posts and sharing.

**Table 59: I dislike “public” feature of Facebook in teaching**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		0	33.33	40.00	26.66	0
Gender	Female	22.85	31.42	28.57	17.14	0
	Total	11.42	32.37	34.28	21.90	0
Stream	Arts	20	28.57	4.28	17.14	0
	Science	6.66	53.33	20.00	13.33	0
	Total	13.33	40.95	12.14	15.23	0
Grand Total		12.37	45.66	23.21	18.56	0

The above table: 59 reported that 12.37% student-teachers strongly agreed and a significant proportion 45.66% student-teacher agreed that I dislike “public” feature of Facebook in teaching.

About gender aspect 0% male and 22.85% female student-teachers strongly agreed and 33.33% male and 31.42% female student-teachers agreed. And about stream 20%, arts and 6.66% science student-teachers strongly agreed and 28.57% arts and a significant proportion 53.33% science student-teacher agreed the statement. Thus it is concluded that a significant proportion of statement in favor I dislike “public” feature of Facebook in teaching.

**Table 60: I feel various subjects texts can be uploaded in Facebook in “notes”**

Gender		SA%	A%	UN%	DA%	SDA%
		Male	19.99	73.33	0	16.66
Gender	Female	39.99	42.85	14.28	2,85	0
	Total	29.99	58.09	7.14	0	0
Stream	Arts	35.97	60.00	11.42	0	0
	Science	32.27	53.33	6.66	0	0
	Total	36.28	56.66	9.04	0	0
Grand Total		31.13	57.37	8.04	0	0

The findings of the table 60 states that with respect to gender 19.99% male and 39.99% female student-teachers strongly agreed that I feel various subjects, texts can be uploaded in Facebook in “notes”, a significant proportion 73.33% male and 42.85% female student-teachers agreed the statement and 35.97% arts and 32.27% science student-teachers favoring strongly agreed whereas a majority 60.00% arts and 53.33% science student-teachers favoring agreed. The grand total 31.13% student-teachers strongly agreed and 57.37% student-teachers agreed that I feel various subjects texts can be uploaded in Facebook in “notes”. This implies that a significant proportion of opinions in favor of I feel various subjects texts can be uploaded in Facebook in “notes”.

**Table 61: I feel interaction of Facebook is a waste of time**

Gender		SA%	A%	UN%	DA%	SDA%
		Male	14.6	6.5	5.5	6.25
Gender	Female	6.4	3.05	7	9.22	0.8
	Total	7.52	9.55	12.5	15.47	1.5
Stream	Arts	11.42	6.01	5.34	14.02	0.8
	Science	6.66	4.02	4.3	10.20	0.2
	Total	8.04	10.03	9.64	24.22	1.42
Grand Total		15.56	19.59	22.14	40	2.5

The findings of the table 61, a small proportion of grand total data 18.56% student-teachers strongly agreed and 26.90% student-teachers agreed that I feel interaction of Facebook is a waste of time. In case gender also 13.33% male and a negligible 5.71% female student-teachers strongly agreed whereas 33.33% male and 19.99% female student-teachers agreed the given statement whereas about stream 11.42% arts and 6.66% science student-teachers strongly agreed and 34.28% arts and 20.00% science student-teachers agreed that I feel interaction of Facebook is a waste of time. Therefore a significant proportion of student-teachers disagreed the statement I feel interaction of Facebook is a waste of time.

**Table 62: I opinion Facebook links can enhance students learning**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		20.00	40.00	26.66	13.33	0
Gender	Female	25.71	57.14	5.70	8.57	2.85
	Total	22.85	48.57	16.18	10.95	1.42
	Arts	17.14	54.28	14.28	14.28	0
Stream	Science	33.33	53.33	6.66	0	6.66
	Total	25.23	53.80	10.47	7.14	3.33
	Grand Total	24.04	50.95	13.32	9.05	2.37

The above table 62 reveals 20.00% male and 25.71% female student-teachers strongly agreed that I opinion Facebook links can enhance students learning and 40.00% male and majority 57.14% female student-teachers in favor of agreed the statement. 17.14% arts and 33.33% science student-teachers strongly agreed and 54.28% arts and 53.33% science student-teachers agreed that I opinion Facebook links can enhance students learning. Grand total data reports 24.04% student-teachers strongly agreed and 50.95% student-teachers agreed given statement. The findings thus indicate that a significant proportion of students agreed on the statement I opinion Facebook links can enhance students learning.

**Table 63: I feel Facebook "update" is a fast and efficient means of providing information**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		33.33	46.66	20.00	0	0
Gender	Female	42.85	39.99	17.14	0	0
	Total	38.09	43.32	18.57	0	0



<b>Stream</b>	<b>Arts</b>	34.28	39.99	25.71	0	0
	<b>Science</b>	40.00	53.33	6.66	0	0
	<b>Total</b>	37.14	46.66	16.18	0	0
<b>Grand Total</b>		37.61	44.99	17.37	0	0

From the table 63 it is indicated that 34.28% arts and 40.00% science student-teachers strongly agreed the statement I feel Facebook “update” is a fast and efficient means of providing information, 39.99% arts and 53.33% science student-teachers agreed whereas with respect to gender aspect 33.33% male and 42.85% female student-teachers strongly agreed and 46.66% male and 39.99% female student-teachers agreed the grand total data 37.61% student-teachers strongly agreed and 44.99% student-teachers agreed that I feel Facebook “update” is a fast and efficient means of providing information. This implies majority of the student-teachers were in support of the statement I feel Facebook “update” is a fast and efficient means of providing information.

**Table 64: I do not think teacher would ever need a Facebook features in my classroom**

<b>Gender</b>		<b>SA%</b>	<b>A%</b>	<b>UN%</b>	<b>DA%</b>	<b>SDA%</b>
		<b>Male</b>	0	26.66	66.66	6.66
<b>Gender</b>	<b>Female</b>	8.57	25.70	22.85	34.28	8.57
	<b>Total</b>	4.28	26.18	44.75	20.47	4.28
	<b>Stream</b>	<b>Arts</b>	5.97	34.28	34.28	20.00
<b>Stream</b>	<b>Science</b>	6.66	6.66	20.00	53.33	13.33
	<b>Total</b>	6.31	20.47	27.14	36.66	8.80
<b>Grand Total</b>		5.29	23.32	35.94	28.56	6.54

The table 64 reported that 5.29% student-teachers strongly agreed and 23.32% student-teachers agreed that I do not think teacher would ever need a Facebook features in my classroom, 26.66% male and 25.70% female student-teachers agreed and 5.97% arts and 6.66% science student-teachers strongly agreed whereas, 34.28% arts and 6.66% science student-teachers agreed that I do not think teacher would ever need a Facebook features in my classroom. It can be thus concluded that a significant proportion of student-teachers were not in favor of the statement I do not think teacher would ever need a Facebook features in my classroom.

**Table 65: I feel Facebook interaction may encourage unethical practices**

		SA%	A%	UN%	DA%	SDA%
<b>Gender</b>	<b>Male</b>	13.33	53.33	33.33	0	0
	<b>Female</b>	28.57	45.71	19.99	5.71	0
	<b>Total</b>	20.95	49.52	26.66	2.85	0
<b>Stream</b>	<b>Arts</b>	25.70	54.28	20.00	0	0
	<b>Science</b>	13.33	60.00	20.00	6.66	0
	<b>Total</b>	19.51	57.14	20.00	3.33	0
<b>Grand Total</b>		20.23	53.33	23.33	3.09	0

The findings of table 65 revealed 13.33% male and 28.57% female student-teachers strongly agreed that I feel Facebook interaction may encourage unethical practices, the data about gender a significant proportion 53.33% male and 45.71% female student-teachers agreed and 25.70% arts and 13.33% science student-teachers strongly agreed whereas 54.28% arts and 60.00% science student-teachers. 20.23% student-teachers strongly agreed and a significant proportion 53.33% student-teacher agreed I feel Facebook interaction may encourage unethical practices. This reveals that majority of student-teachers in favor of the statement I feel Facebook interaction may encourage unethical practices.

**Table 66: I feel Facebook improvises interaction through browsing sites, downloading, saving etc**

		SA%	A%	UN%	DA%	SDA%
<b>Gender</b>	<b>Male</b>	33.33	46.66	16.33	0	0
	<b>Female</b>	51.43	45.71	0	0	0
	<b>Total</b>	42.38	46.18	3	0	0
<b>Stream</b>	<b>Arts</b>	38.40	62.85	2.85	0	0
	<b>Science</b>	46.66	46.66	0	0	6.66
	<b>Total</b>	40.00	54.75	1.42	0	3.33
<b>Grand Total</b>		41.19	50.46	4.02	0	3.33

The table 66 supported that a significant proportion of student teachers in favor of I feel Facebook improvises interaction through browsing sites, downloading, saving etc. 41.19% student-teachers strongly agreed it and a majority 50.46% student-teachers agreed and the findings of gender

33.33% male and a significant proportion 51.43% female student-teachers strongly agreed and 38.40% male and 45.71% female student-teachers agreed the statement. The findings of stream reported 34.28% arts and 46.66% science student-teachers strongly agreed whereas, majority 62.85% arts and 46.66% science student-teachers agreed the statement.

**Table 67: I find Facebook offers real advantages over traditional learning**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		6.66	46.66	40.00	6.00	0
Gender	Female	17.14	42.40	11.42	19.99	0
	Total	11.2	44.53	25.71	13.32	0
Stream	Arts	14.28	57.14	14.28	14.28	0
	Science	20.00	33.33	26.66	20.00	0
	Total	17.14	45.23	20.47	17.14	0
Grand Total		14.17	44.88	23.09	15.06	0

The data of table 67 indicated that 14.28% arts and 20.00% science student-teachers strongly agreed that I find Facebook offers real advantages over traditional learning and a significant proportion 57.14% arts and 33.33% science student-teachers agreed. With respect to gender 6.66% male and 17.14% female student-teachers strongly agreed whereas 46.20% male and a majority 42.40% female student-teacher agreed. 14.17% student-teachers strongly agreed and 44.88% student-teachers agreed that I find Facebook offers real advantages over traditional learning and a significant proportion. Since majority of the student-teachers were in support of the statement it can be said that I find Facebook offers real advantages over traditional learning.

**Table 68: I feel Facebook in the classroom would make the subject matter more interesting**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		33.33	42.90	36.66	6.66	0
Gender	Female	34.28	48.56	8.57	8.57	0
	Total	33.80	45.73	22.61	7.61	0
Stream	Arts	25.71	45.79	22.85	5.71	0
	Science	53.33	40.00	0	6.66	0
	Total	22.35	42.89	11.42	6.18	0
Grand Total		27.77	44.31	24.01	7.21	0

Table 68 reported that 27.77% student-teachers strongly agreed and a majority 44.31% student-teacher in favor of agreed the statement I feel Facebook in the classroom would make the subject matter more interesting. With respect to gender 33.33% male and 34.28% female student-teachers strongly agreed whereas 42.90% male and a majority 48.56% female student-teacher agreed. The findings 25.71% arts and a significant 53.33% science student-teacher strongly agreed that I feel Facebook in the classroom would make the subject matter more interesting, 45.79% arts and 40% science student-teachers agreed. Thus, it can be seen that majority goes along with the statement I feel Facebook in the classroom would make the subject matter more interesting.

**Table 69: I assume Facebook has no place in colleges for the interaction**

Gender		SA%	A%	UN%	DA%	SDA%
		Male	6.66	18.00	38.00	26.66
	Female	11.42	35.14	20.85	17.14	4.42
	Total	9.04	26.57	26.42	17.4	2.04
Stream	Arts	8.57	59.42	15.00	16.00	0
	Science	6.66	18.00	15.00	9.33	33.33
	Total	7.61	33.5	15.00	12.66	19.66
Grand Total		8.32	30.05	20.71	29.56	10.85

The above table 69 revealed that 6.66% male and 11.42% female student-teachers strongly agreed that I assume Facebook has no place in colleges for the interaction, The data about gender 18.00% male and 35.14% female student-teachers agreed the statement and with respect to stream 8.57% arts and 6.66 science student-teachers strongly agreed and a significant proportion 59.42% arts and 18.00% science student-teachers agreed that I assume Facebook has no place in colleges for the interaction. Thus, it is concluded that 8.32% student-teachers strongly agreed and 30.05% student-teachers agreed that I assume Facebook has no place in colleges for the interaction.

**Table 70: I feel class time is too short for interaction through Facebook teaching**

Gender		SA%	A%	UN%	DA%	SDA%
		Male	26.66	46.66	26.66	0
	Female	22.85	71.42	2.85	2.85	0
	Total	24.75	59.04	14.75	1.42	0

<b>Stream</b>	<b>Arts</b>	20.00	60.00	14.28	5.71	0
	<b>Science</b>	13.33	86.66	0	0	0
	<b>Total</b>	16.66	73.33	7.14	2.85	0
<b>Grand Total</b>		20.70	66.18	10.94	2.13	0

The findings of table 70 reported that 20.00% arts and 13.33% science stream student-teachers strongly agreed that I feel class time is too short for interaction through Facebook teaching and a significant proportion 60.00% arts and 86.66% science student-teachers agreed the statement whereas 26.66% male and 22.85% female student-teachers strongly agreed and 46.66% male and a significant 71.42% female student-teachers agreed the given statement. 20.70% student-teachers strongly agreed and 66.18% student-teachers agreed that I feel class time is too short for interaction through Facebook teaching. This therefore reveals that majority of student-teachers in favor of I feel class time is too short for interaction through Facebook teaching.

**Table 71: Facebook interaction suits students learning preferences**

<b>Gender</b>		<b>SA%</b>	<b>A%</b>	<b>UN%</b>	<b>DA%</b>	<b>SDA%</b>
		<b>Male</b>	6.66	60.00	20.00	13.33
<b>Female</b>		31.42	34.28	28.57	2.85	2.85
<b>Total</b>		19.04	47.14	24.28	8.09	1.42
<b>Stream</b>	<b>Arts</b>	30.54	37.45	28.57	5.71	0
	<b>Science</b>	28.66	40.00	20.00	0	6.66
	<b>Total</b>	29.60	38.72	24.28	2.85	3.33
<b>Grand Total</b>		24.32	42.93	24.28	5.47	2.37

The data about grand total given in the table 71 revealed that 24.32% student-teachers strongly agreed and 42.93% student-teachers agreed that Facebook interaction suits students learning preferences. 6.66% male and 31.42% female student-teachers strongly agreed, a significant proportion 60.00% male and 34.28% female student-teacher agreed. With respect to stream, 30.54% arts and 28.66% science student-teachers strongly agreed and 37.45% arts and 40% science student-teachers agreed that Facebook interaction suits students learning preferences.

**Table 72: I opinion it would be hard for teacher to use the Facebook as a tool of teaching**

Gender		SA%	A%	UN%	DA%	SDA%
		Male	0	53.33	20.00	20.00
Gender	Female	5.71	31.42	22.85	25.71	14.28
	Total	2.85	42.37	21.42	22.85	10.47
	Arts	2.85	45.71	17.14	25.70	11.42
Stream	Science	6.66	26.66	33.33	6.66	26.66
	Total	4.75	36.18	25.23	16.18	18.56
	Grand Total	7.80	39.27	23.32	19.51	9.28

Table 72 indicated that data about gender, 0% male and 5.71% female student-teachers strongly agreed that I opinion it would be hard for teacher to use the Facebook as a tool of teaching. It is interpreted that 53.33% male and 31.42% female student-teachers agreed whereas 2.85% arts and 6.66% science student-teachers strongly agreed and a majority stream 45.71% arts and 40% science student-teachers agreed statement. The grand total figures 7.80% student-teachers favoring strongly agreed and majority among them 39.27% student-teachers agreed the statement I opinion it would be hard for teacher to use the Facebook as a tool of teaching. Thus, it can be concluded that a significant proportion of student-teachers supporting the statement I opinion it would be hard for teacher to use the Facebook as a tool of teaching.

**Table 73: I have no difficulty in understanding the basic interactive functions of Facebook**

Gender		SA%	A%	UN%	DA%	SDA%
		Male	38.66	46.66	13.33	13.33
Gender	Female	37.14	54.28	5.71	2.85	0
	Total	37.90	50.47	9.52	8.09	0
	Arts	34.28	51.20	8.57	5.71	0
Stream	Science	38.66	33.33	6.66	6.66	0
	Total	36.47	42.26	7.61	6.18	0
	Grand Total	37.18	46.36	8.56	7.13	0

It is understood from the data of table 73 indicated that 34.28% arts and 38.66% science student-teachers favoring strongly agreed that I have no difficulty in understanding the basic interactive

functions of Facebook and 51.20% arts proportion and 33.33% science student-teachers agreed whereas 38.66% male and 37.14% female student-teachers strongly agreed and 46.66% male and a significant 54.28% female student-teachers agreed given statement. 37.18% student-teachers strongly agreed and 46.36% student-teachers agreed in case grand total. Therefore, it is concluded that I have no difficulty in understanding the basic interactive functions of Facebook.

**Table 74: I can easily learn to operate videos of Facebook wall**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		53.33	40.00	0	6.66	0
Gender	Female	37.40	51.52	8.57	2.85	0
	Total	45.36	45.76	4.28	4.75	0
Stream	Arts	37.49	51.42	5.71	5.71	0
	Science	53.33	46.66	0	0	0
	Total	45.41	49.04	2.85	2.85	0
Grand Total		45.38	47.40	3.56	3.8	0

The above table 74 revealed 37.49% arts stream student-teachers and 53.33% science strongly agreed that I can easily learn to operate videos of Facebook wall., 51.42% arts and 46.66% science student-teachers agreed whereas majority 53.33% male and 37.40% female student-teachers strongly agreed and 40.00% male and 51.52% female student-teachers agreed the statement. 45.38% student-teachers strongly agreed and 47.40% student-teachers agreed that I can easily learn to operate videos of Facebook wall. The findings of the table are saying that most of the student-teachers in favor of the statement I can easily learn to operate videos of Facebook wall.

**Table 75: I eager to see Facebook features are proliferating as a learning tool in education**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		10.65	73.33	20.00	0	0
Gender	Female	27.71	51.42	22.85	0	0
	Total	18.18	62.37	21.42	0	0
Stream	Arts	6.28	68.56	17.14	0	0
	Science	33.33	40.00	26.66	0	0
	Total	19.80	54.28	24.04	0	0
Grand Total		18.49	58.32	22.73	0	0

The findings of the table 75 indicated that 10.65% male student-teachers and 25.71% female strongly agreed that I eager to see Facebook features are proliferating as a learning tool in education. It is understood from the gender a significant proportion 73.33% male and 51.42% female student-teachers agreed whereas 4.28% arts stream and 33.33% science stream student-teachers strongly agreed the statement and majority 68.56% arts and 40% science student-teachers agreed. The figures of grand total 18.49% student-teachers strongly agreed and a significant proportion 58.32% student-teacher agreed that I eager to see Facebook features are proliferating as a learning tool in education. Thus, it is however concluding that majority of proportion of student-teachers supported the statement I eager to see Facebook features are proliferating as a learning tool in education.

**Table 76: Facebook will not make me any difference in our classrooms, schools, or lives**

Gender		SA%	A%	UN%	DA%	SDA%
	Male		13.33	21.32	20.00	6.66
Female		22.85	41.50	17.14	11.42	0
Total		09.04	34.91	37.14	9.04	3.33
Stream	Arts	17.14	57.14	17.14	8.57	0
	Science	20.00	40.00	20.00	13.66	6.66
	Total	18.57	41.57	18.57	11.11	3.33
<b>Grand Total</b>		13.80	41.74	27.85	12.38	3.33

It is seen from the grand total that 13.80% student-teachers strongly agreed and 41.74% student-teachers agreed the statement Facebook will not make me any difference in our classrooms, schools, or lives. incase gender figure reported that 13.33% male and 21.32% female student-teachers strongly agreed that Facebook will not make me any difference in our classrooms, schools, or lives. And a significant proportion 53.33% male and 48.50% female student-teachers agreed and with respect to stream 17.14% arts and 20.00% science student-teachers strongly agreed and majority 57.14% arts and 40% science student-teachers agreed. Thus, it is clear that majority proportion of student-teachers favoring the statement Facebook will not make me any difference in our classrooms, schools, or lives.



**Table 77: I prefer learning from teachers over Facebook interactive mode**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		20.00	50.76	6.66	6.66	0
Gender	Female	14.28	34.28	5.71	31.42	14.28
	Total	34.28	50.47	6.18	19.04	7.14
Stream	Arts	17.14	37.14	8.57	25.71	11.42
	Science	26.66	40.00	6.66	20.00	6.66
	Total	21.90	38.57	7.61	22.85	5.71
Grand Total		28.09	40.52	6.89	20.94	2.85

The figures given in the table 77 supported that a significant proportion of student-teachers 50.76% male and 34.28% female student-teachers agreed the statement I prefer learning from teachers over Facebook interactive mode. Figures about stream 17.14% arts and 26.66% science student-teachers strongly agreed and 37.14% arts and 40% science student-teachers agreed the statement. The data belongs to gender 20.00% male and 14.28% female student-teachers strongly agreed and in grand total 28.09% student-teachers, strongly agreed and majority 40.52% student-teachers agreed that I prefer learning from teachers over Facebook interactive mode. It can be thus concluded that most proportion of student-teachers supported that I prefer learning from teachers over Facebook interactive mode.

**Table 78: I feel Facebook that suit better our culture and identity**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		0	46.66	20.00	33.33	0
Gender	Female	14.28	8.57	34.28	22.85	19.99
	Total	7.14	20.61	25.14	20.09	19.99
Stream	Arts	5.71	14.28	28.57	31.42	20.00
	Science	9.97	40.00	40.00	0	0
	Total	7.85	25.14	29.28	24.75	19.00
Grand Total		7.49	22.87	27.21	22.42	19.49

Data about stream 5.71% arts and 9.97% science student-teachers strongly agreed that I feel Facebook that suit better our culture and identity and 14.28% arts and 40.00% science student-teachers agreed the statement whereas 0% male and 14.28% female student-teachers strongly agreed and with respect to gender aspect 46.66% male and 8.57% female student-teachers agreed that I feel Facebook that suit better our culture and identity. Findings of grand total reported that 7.49% student-teachers strongly agreed and 22.87% student-teachers agreed the given statement. I feel Facebook that suit better our culture and identity. Since majority of the student-teachers were in favor of the statement I feel Facebook that suit better our culture and identity.

**Table 79: Using Facebook would not hinder Indian generations from learning their traditions**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		13.33	33.33	33.33	20.00	0
Gender	Female	17.14	42.85	22.85	14.28	2.85
	Total	15.23	38.09	28.09	17.14	1.42
Stream	Arts	20.00	39.99	22.85	14.28	0
	Science	6.66	40.00	26.66	20.00	6.66
	Total	13.33	39.99	24.75	17.14	3.33
Grand Total		14.28	39.09	26.42	17.14	2.37

As seen from the table 39.99% arts stream student-teachers and a majority of 40.00% student-teachers agreed the statement using Facebook would not hinder Indian generations from learning their traditions. The above table reveals 13.33% male and 17.14% female student-teachers strongly agreed the statement and 33.33% male and 42.85% female student-teachers agreed it whereas 20.00% arts and 6.66% science student-teachers strongly agreed and 14.28% student-teachers strongly agreed and 39.09% agreed student-teachers agreed that using Facebook would not hinder Indian generations from learning their traditions. Thus, it can be seen that majority goes with the statement that using Facebook would not hinder Indian generations from learning their traditions.

**Table 80: I confirm requests of friends to become part of the Facebook community**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		20.00	56.66	13.33	0	0
Gender	Female	17.14	48.70	22.85	11.42	2.85
	Total	18.57	52.68	20.09	5.71	1.42

<b>Stream</b>	<b>Arts</b>	17.14	20.00	17.14	5.71	2.85
	<b>Science</b>	13.33	26.44	20.00	13.33	0
	<b>Total</b>	15.23	23.22	18.57	10.52	1.42
<b>Grand Total</b>		16.9	37.95	19.33	8.11	1.42

The above table 80 reveals 20.00% male and 17.14% female student-teachers strongly agreed that I confirm requests of friends to become part of the Facebook community and a majority proportion 56.66% male and 48.70% female student-teachers agreed the statement. 17.14% arts and 13.33% science student-teachers strongly agreed and 20.00% arts and 26.44% science student-teachers agreed the statement. The grand total data 26.44% student-teachers strongly agreed and a significant proportion 23.22% student-teacher agreed the given statement that I confirm requests of friends to become part of the Facebook community and a majority proportion. This implies that student-teacher favor the statement I confirm requests of friends to become part of the Facebook community.

**Table 81: Facebook mode of education has proved to be effective learning environment**

<b>Gender</b>		<b>SA%</b>	<b>A%</b>	<b>UN%</b>	<b>DA%</b>	<b>SDA%</b>
		<b>Male</b>	6.66	39.30	6.66	13.33
<b>Female</b>	<b>Female</b>	19.99	54.28	17.14	8.57	0
	<b>Total</b>	13.32	46.79	11.90	10.95	0
<b>Stream</b>	<b>Arts</b>	17.14	57.14	17.14	8.51	0
	<b>Science</b>	20.00	43.36	6.66	0	0
	<b>Total</b>	18.57	50.25	11.90	4.25	0
<b>Grand Total</b>		31.89	48.52	11.90	7.6	0

The findings of the table 81 indicated that 31.89% student-teachers strongly agreed and a significant proportion 48.52% student-teacher agreed that Facebook mode of education has proved to be effective learning environment. Data about gender 6.66% male student-teachers and 19.99% female student-teachers strongly agreed and a significant proportion 39.30% male student-teacher and 54.28% female student-teachers agreed same statement. 17.14% arts and 20.00% science student-teachers strongly agreed that facebook mode of education has proved to be effective learning environment, whereas majority 57.14% arts and 73.33% science student-teachers agreed

it. Since majority of the students were in favor of the statement facebook mode of education has proved to be effective learning environment.

**Table 82: Facebook modes enable me to learn about applications in a more efficient way compared to books, web pages, etc**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		0	59.99	20.00	13.33	6.66
Gender	Female	25.91	42.85	14.28	13.14	0
	Total	12.95	51.42	17.14	13.23	3.33
	Arts	14.28	54.28	11.42	17.14	2.85
Stream	Science	26.66	53.33	6.66	13.33	0
	Total	20.47	53.80	9.02	15.23	1.42
	Grand Total	16.71	52.61	13.09	14.23	2.37

The figures of table 82 reported that 14.28% arts and 26.66% science student-teachers strongly agreed that Facebook mode enable me to learn about applications in a more efficient way compared to books, web pages, etc. and a significant proportion 54.28% arts stream student-teachers and 53.33% science student-teachers agreed the statement. Gender data 0% male student-teachers and 25.91% female strongly agreed it. A majority 59.99% male student-teacher and 42.85% female agreed. Related to grand total 16.71% student-teachers strongly agreed and 52.61% student-teachers agreed the given statement. It can be seen that majority goes with the statement Facebook mode enable me to learn about applications in a more efficient way compared to books, web pages, etc.

**Table 83: I would prefer to learn about the functionality of Facebook options and applications**

Gende	Male	SA%	A%	UN%	DA%	SDA%
		6.66	18.00	13.33	0	10.20
Gende	Female	19.99	68.56	5.71	5.71	8.60
	Total	13.37	43.28	9.52	5.71	9.40
	Arts	11.42	65.71	11.42	5.71	10.00
Stream	Science	33.33	66.66	0	0	9.20
	Total	23.35	66.65	11.42	5.71	9.60
	Grand Total	18.36	54.73	10.47	5.71	10.00

The table 83 revealed that data about stream 11.42% arts student-teacher and 33.33% science student-teachers strongly favoring that I would prefer to learn about the functionality of Facebook options and applications. As for as stream a majority 65.71% arts student-teachers and 66.66% science. Gender data 6.66% male and 19.99% female student-teachers strongly agreed and 18.00% male and a majority proportion 68.56% female student-teacher agreed. 18.36% student-teachers strongly agreed and 54.73% student-teachers agreed that I would prefer to learn about the functionality of Facebook options and applications. As majority of student-teachers in favor of the statement, I would prefer to learn about the functionality of Facebook options and applications.

**Table 84: I feel Facebook is part of my everyday activity**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		20.00	7.49	0	36.66	13.33
Gender	Female	0	22.85	19.99	48.56	11.42
	Total	20.00	25.17	9.99	38.61	12.32
	Arts	2.85	17.14	20.00	48.56	11.42
Stream	Science	26.66	33.32	0	26.66	13.33
	Total	14.75	19.32	10	37.61	12.37
	Grand Total	17.37	20.20	19.99	38.11	12.37

It is understood from the gender data that 20.00% male and 0% female student-teachers strongly agreed that I feel Facebook is part of my everyday activity and 7.49% male and 22.85% female student-teachers agreed. With respect to stream, 2.85% arts student-teachers and 26.66% science student-teachers strongly agreed and 17.14% arts and 33.32% science student-teachers agreed the statement. The data of grand total 17.37% student-teachers in favoring strongly agreed and 20.20% student-teachers agreed. It is concluded that most of opinions are against to the statement I feel Facebook is part of my everyday activity.

**Table 85: Facebook will increase our dependence on internet, system, power supply, accessories etc**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		46.66	53.33	0	0	0
Gender	Female	33.14	54.28	2.85	5.71	0
	Total	39.90	53.80	1.42	2.85	0

<b>Stream</b>	<b>Arts</b>	39.99	54.28	2.85	2.85	0
	<b>Science</b>	26.66	73.33	0.8	0	0
	<b>Total</b>	33.32	63.80	1.82	1.42	0
<b>Grand Total</b>		36.61	58.80	1.62	2.13	0

The table 85 indicated that 36.61% student-teachers strongly agreed and 58.80% student-teachers agreed that Facebook will increase our dependence on internet, system, power supply, accessories etc. The gender aspect 46.66% male student-teachers and 33.14% female strongly agreed and 53.33% male and 54.28% female student-teachers agreed the same. The figures about stream 39.99% arts and 26.66% science student-teachers in favor of strongly agreed whereas 54.28% arts student-teachers and 73.33% science student-teachers favoring agreed. Thus, it is concluded that Facebook will increase our dependence on internet, system, power supply, accessories etc.

**Table 86: There are social issues that need to be addressed before implementing Facebook in education**

<b>Gender</b>	<b>Male</b>	<b>SA%</b>	<b>A%</b>	<b>UN%</b>	<b>DA%</b>	<b>SDA%</b>
		0	80	20	0	0
<b>Gender</b>	<b>Female</b>	77.13	19.99	2.85	0	0
	<b>Total</b>	38.56	49.99	11.42	0	0
	<b>Stream</b>	<b>Arts</b>	48.56	42.85	8.57	0
<b>Stream</b>	<b>Science</b>	60.00	20.00	20.00	0	0
	<b>Total</b>	54.28	31.42	14.28	0	0
<b>Grand Total</b>		46.42	40.70	12.85	0	0

The findings of the table 86 reported that 48.56% arts student-teachers and 60.00% science student-teachers strongly agreed that there are social issues that need to be addressed before implementing Facebook in education and data obtained from table gives in favor of 42.85% arts student-teachers and 20.00% science student-teachers agreed whereas 0% male student-teachers and 77.13% female student-teachers strongly agreed favoring the given statement and a majority 80% male student-teachers and 19.99% female student-teachers agreed. The grand total data 46.42% student-teachers strongly agreed and 40.70% student-teachers agreed that there are social issues that need to be addressed before implementing Facebook in education. It can be seen that

majority goes with the statement there are social issues that need to be addressed before implementing Facebook in education.

**Table 87: The instructor provided basic training helped me to operate Facebook account.**

Gender		SA%	A%	UN%	DA%	SDA%
		Male	6.66	73.33	13.33	0
Gender	Female	25.45	65.71	5.71	0	2.85
	Total	16.05	69.52	9.52	0	2.45
	Arts	20.00	65.71	11.42	0	2.85
Stream	Science	20.00	73.33	0	0	3.25
	Total	20.00	69.52	5.71	0	3.05
	Grand Total	20.00	69.52	7.61	0	2.75

Table 87 revealed that 6.66% male student-teacher and 25.45% female strongly agreed that the instructor provided basic training helped me to operate Facebook account and findings of gender 73.33% male student-teachers and 65.71% female student-teachers agreed and 20.00% arts and 20.00% science student-teachers strongly whereas 65.71% arts stream and 73.33% science student-teachers agreed given statement. 20.00% student-teachers strongly agreed and 69.52% student-teachers agreed that the instructor provided basic training helped me to operate facebook account.

**Table 88: I hesitate to use a Facebook massaging, chat box and video calling.**

Gender		SA%	A%	UN%	DA%	SDA%
		Male	6.66	40.00	6.66	40.00
Gender	Female	5.70	34.28	34.28	40.24	0
	Total	6.18	37.14	20.47	40.12	13.33
	Arts	5.71	28.78	22.85	17.14	5.71
Stream	Science	13.33	26.66	26.00	26.02	6.66
	Total	9.52	27.72	24.42	34.32	6.18
	Grand Total	7.85	32.43	22.44	37.27	9.75

Table 88 indicated that 7.85% student-teachers strongly agreed and 32.43% student-teachers agreed that I hesitate to use a Facebook massaging, chat box and video calling. Data about gender

given in table 6.66% male student-teachers and 5.70% female student-teachers strongly agreed that I hesitate to use a Facebook massaging, chat box and video calling and 40.00% male and 34.28% female student-teachers in favor of agreed. Data about stream 5.71% arts and 13.33% science student-teachers strongly agreed and 28.78% arts student-teachers and 26.66% science student-teachers agreed the given statement. It means that a significant proportion of student-teachers against to the statement I hesitate to use a Facebook massaging, chat box and video calling.

**Table 89: I feel interactive materials could be easily posted on Facebook wall**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		33.33	53.33	13.33	0	0
Gender	Female	28.57	62.85	5.71	2.85	0
	Total	30.95	58.09	9.52	2.85	0
Stream	Arts	28.57	60.00	8.57	2.85	0
	Science	26.64	58.66	6.66	0	0
	Total	27.60	59.33	7.61	2.85	0
Grand Total		29.27	58.71	8.56	2.85	0

It is interpreted from the table 89 that 33.33% male student-teachers and 28.57% female student-teachers strongly agreed that I feel interactive materials could be easily posted on Facebook wall and 53.33% male and 62.85% female student-teachers agreed whereas 28.57% arts and 26.64% science student-teachers strongly agreed and 60.00% arts and 58.66% science student-teachers agreed the given statement. 29.27% student-teachers strongly agreed and 60.71% student-teachers agreed. Thus it can be therefore concluded that a significant proportion of student-teachers in favor of I feel interactive materials could be easily posted on Facebook wall.

**Table 90: I feel intimidated by Facebook based interaction at college, home, internet café, etc. when required**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		13.33	53.33	20.00	13.33	0
Gender	Female	19.99	57.14	5.71	19.14	0
	Total	16.66	55.23	12.85	16.23	0



<b>Stream</b>	<b>Arts</b>	12.88	60.00	8.57	20.00	0
	<b>Science</b>	20.33	53.33	6.66	13.33	0
	<b>Total</b>	16.60	56.66	7.61	16.66	0
<b>Grand Total</b>		16.63	55.94	10.23	16.44	0

The data mentioned in the table, 16.63% student-teachers strongly agreed and 55.94% student-teachers agreed that I feel intimidated by Facebook based interaction at college, home, internet café etc. when required. 13.33% male and 19.99% female student-teachers strongly agreed and a significant proportion 53.33% male and 57.14% female student-teachers agreed whereas 12.88% arts and 20.33% science student-teachers strongly agreed and 60.00% arts and 53.33% science student-teachers agreed. The findings revealed that I feel intimidated by Facebook based interaction at college, home, internet café etc. when required. It implies that a majority goes with the statement I feel intimidated by Facebook based interaction at college, home, internet café etc.

**Table 91: Two-way communication of Facebook may benefit students from communication with each other, teachers, and staff**

<b>Gender</b>		<b>SA%</b>	<b>A%</b>	<b>UN%</b>	<b>DA%</b>	<b>SDA%</b>
		<b>Male</b>	20.00	66.66	13.33	0
<b>Female</b>	<b>Female</b>	34.28	59.99	5.71	0	0
	<b>Total</b>	27.14	63.32	9.52	0	0
<b>Stream</b>	<b>Arts</b>	20.00	71.42	8.57	0	0
	<b>Science</b>	53.3	46.66	10.98	0	0
	<b>Total</b>	36.65	59.04	9.77	0	0
<b>Grand Total</b>		28.32	61.18	9.64	0	0

The findings reported that with respect to stream 20.00% arts and 53.3% science student-teachers strongly agreed and 71.42% arts and 46.66% science student-teachers agreed whereas 28.32% student-teachers strongly agreed and 61.18% student-teachers agreed and 20.00% male and 34.28% female student-teachers strongly agreed the statement. A majority of 66.66% male and 59.99% female student-teachers agreed that two-way communication of Facebook may benefit students from communication with each other, teachers, and staff. Thus, two-way communication of Facebook may benefit students from communication with each other, teachers, and staff.

**Table 92: I feel Facebook based education will enhance the pedagogic value of a course**

Gender		SA%	A%	UN%	DA%	SDA%
		Male	20.00	46.66	19.22	0
Gender	Female	25.70	59.99	11.42	2.85	0
	Total	22.85	53.32	15.32	1.42	3.33
Stream	Arts	20.00	54.28	17.33	0	2.85
	Science	33.33	66.66	9.45	0	0
	Total	26.66	60.47	13.39	0	2.85
Grand Total		24.75	56.89	13.37	1.42	3.09

The above table 92 indicated that 20.00% male and 25.70% female student-teachers strongly agreed the statement I feel Facebook based education will enhance the pedagogic value of a course. 46.66% male and a majority 59.99% female student-teacher agreed whereas 14.28% arts and 59.94% science student-teachers strongly agreed and 20.00% arts and 33.33% science student-teachers agreed the same. In case grand total 24.75% student-teachers strongly agreed and 56.89% student-teachers agreed. It can however be seen that majority of the student-teachers support the statement I feel Facebook based education will enhance the pedagogic value of a course.

**Table 93: I feel Facebook based interactive materials are not effective for student learning**

Gender		SA%	A%	UN%	DA%	SDA%
		Male	6.66	36.66	46.66	3.33
Gender	Female	2.85	8.57	22.85	48.50	9.14
	Total	4.75	20.00	34.75	25.91	7.9
Stream	Arts	2.85	20.00	28.57	42.85	5.71
	Science	20.00	33.33	20.00	20.00	13.33
	Total	11.42	24.66	24.28	31.42	9.52
Grand Total		8.05	22.63	29.51	28.66	8.71

Table 93 reported 2.85% arts and 20.00% science student-teachers strongly agreed that Facebook access the interaction and collaborate with friends, relatives and others, and 20.00% arts and 33.33% science student-teachers agreed that Facebook access the interaction and collaborate with friends, relatives and others. 8.05% student-teachers strongly agreed and 24.63% student-teachers

found that I feel Facebook access the interaction and collaborate with friends, relatives and others. Whereas 6.66% male and 2.85% female student-teachers strongly agreed and 36.66% male and 8.57% female student-teachers agreed the same. Therefore, a significant proportion of student-teachers against to the statement I feel Facebook access the interaction and collaborate with friends, relatives and others,

**Table 94: I opinion Facebook based learning experiences cannot be equated with face to face teaching**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		13.33	46.66	33.33	6.66	0
Gender	Female	11.42	59.99	19.99	2.85	2.85
	Total	12.37	53.32	26.66	4.75	1.42
	Stream	Arts	17.14	60.00	20.00	0
Science	19	40.00	26.66	13.33	0	
Total	19.57	50	23.33	6.66	1.42	
Grand Total		10.28	51.66	24.99	9.99	2.48

The table 94 about grand total, 9.28% student-teachers strongly agreed and 51.66% student-teachers agreed that I opinion Facebook based learning experiences cannot be equated with face to face teaching and 11.42% female student-teachers strongly agreed whereas 46.66% male student-teachers and a significant proportion 59.99% female student-teacher agreed. it is understood from 17.14% arts stream and 20.00% science student-teachers strongly agreed and 60.00% arts and 40.00% science student-teachers agreed that I opinion Facebook based learning experiences cannot be equated with face to face teaching. Thus majority of student-teachers in favor of the statement I opinion Facebook based learning experiences cannot be equated with face to face teaching.

**Table 95: I would rather like face to face environment rather than teaching via the Facebook**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		0	93.33	6.66	0	0
Gender	Female	17.14	65.75	11.42	5.71	0
	Total	8.57	79.54	9.04	2.85	0

<b>Stream</b>	<b>Arts</b>	11.42	71.42	11.42	5.71	0
	<b>Science</b>	40.00	40.00	20.00	0	0
	<b>Total</b>	25.71	55.71	15.71	2.85	0
<b>Grand Total</b>		17.14	67.62	12.37	2.85	0

The data from table 95 indicated that 0% male and 17.14% female student-teachers strongly agreed that I would rather like face to face environment rather than teaching via the Facebook, a significant 93.33% male student-teachers and 65.75% female student-teachers agreed the statement whereas with respect to stream 11.42% arts student-teachers and 40.00% science student-teachers strongly agreed and 71.42% arts student-teachers and a majority 40.00% science student-teachers it. The grand total data 17.14% student-teachers strongly agreed and a significant 67.62% student-teacher agreed that I would rather like face to face environment rather than teaching via the Facebook. Since majority of student-teachers in favor of the given statement I would rather like face to face environment rather than teaching via the Facebook.

**Table 96: I am happy with content based interactive materials posted on Facebook**

<b>Gender</b>		<b>SA%</b>	<b>A%</b>	<b>UN%</b>	<b>DA%</b>	<b>SDA%</b>
	<b>Male</b>		20.00	66.66	13.33	17.40
<b>Female</b>		17.14	57.14	22.85	14.02	0
<b>Total</b>		18.57	61.90	18.09	13.57	0
<b>Stream</b>	<b>Arts</b>	22.85	18.56	22.85	15.71	0
	<b>Science</b>	20.00	66.66	6.66	17.53	6.66
	<b>Total</b>	21.42	42.61	14.75	16.62	3.33
<b>Grand Total</b>		19.99	52.25	16.42	15.70	1.66

The findings of table 96 reported that 22.85% arts and 20.00% science student-teachers strongly agreed that I am happy with content based interactive materials posted on Facebook and the findings of stream 18.56% arts student-teachers and a majority 66.66% science student-teacher agreed whereas 20.00% male and 17.14% female student-teachers strongly agreed whereas a significant 66.66% male student-teachers and 57.14% female student-teachers agreed. It can be seen that 19.99% student-teachers strongly agreed and 52.25% student-teachers agreed that I am happy with content based interactive materials posted on Facebook.

**Table 97: I like to share with others about Facebook based education materials.**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		6.66	86.65	6.66	0	0
Gender	Female	31.42	62.85	5.71	0	0
	Total	19.04	74.75	6.18	0	0
Stream	Arts	22.85	71.42	5.71	0	0
	Science	26.66	66.66	6.66	0	0
	Total	24.75	69.04	6.18	0	0
Grand Total		21.89	71.89	6.18	0	0

The table 97 reported 6.66% male and 31.42% female student-teachers strongly agreed that I like to share with others about Facebook based education materials. A significant 86.65% male student-teacher and 62.85% female student-teachers agreed. Whereas 22.85% arts stream student-teachers and 26.66% science student-teachers strongly agreed, a significant 71.42% arts stream student-teachers and 66.66% science student-teachers agreed the statement. Thus, it is reported 21.89% student-teachers strongly agreed and 71.89% student-teachers agreed that I like to share with others about Facebook based education materials.

**Table 98: I feel Facebook mode of instruction is difficult to handle**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		6.66	46.66	13.33	20.00	13.33
Gender	Female	8.57	34.28	17.14	31.42	8.57
	Total	7.61	40.47	15.23	25.71	10.95
Stream	Arts	11.42	42.85	14.28	22.85	8.57
	Science	6.66	20.00	13.33	46.66	13.33
	Total	9.04	31.42	13.80	34.75	10.95
Grand Total		8.32	35.94	14.51	30.23	10.95

The table 98 revealed about grand total 6.66% male and 8.57% female student-teachers strongly agreed that I feel Facebook mode of instruction is difficult to handle. And 46.66% male student-teachers and 34.28% female student-teachers agreed. About stream 11.42% arts and a majority 6.66% science student-teachers strongly agreed 42.85% arts stream and 20.00% science student-teachers agreed. The figures of grand total 8.32% student-teachers strongly agreed and 35.94%

student-teachers agreed that I feel Facebook mode of instruction is difficult to handle. Therefore, this implies that a majority of student teachers supported the statement I feel Facebook mode of instruction is difficult to handle.

**Table 99: I feel there are unlimited possibilities for the use of Facebook based educational materials**

Gender	Male	SA%	A%	UN%	DA%	SDA%
			0	72.99	26.66	0
	Female	22.85	68.86	8.57	0	0
	Total	11.42	70.92	17.61	0	0
Stream	Arts	11.42	65.71	22.85	0	0
	Science	26.66	73.33	0	0	0
	Total	19.04	69.52	11.42	0	0
<b>Grand Total</b>		15.23	70.22	14.51	0	0

The given in the table 99 15.23% student-teachers strongly agreed and a significant 70.30% student-teachers agreed that I feel there are unlimited possibilities for the use of Facebook based educational materials and 0% male and 22.85% female student-teachers strongly agreed whereas 73.33% male and 68.86% female student-teachers agreed. with respect to stream 11.42% arts and 26.66% science student-teachers strongly agreed and 65.71% arts and 73.33% science student-teachers agreed the given statement. Thus it can be concluded that majority of student-teachers supported the statement I feel there are unlimited possibilities for the use of Facebook based educational materials.

**Table 100: I feel Facebook interaction will increase teachers' efficiency in teaching**

Gender	Male	SA%	A%	UN%	DA%	SDA%
			40.00	46.66	13.33	0
	Female	45.70	48.56	2.85	0	2.85
	Total	42.85	47.61	8.09	0	1.42
Stream	Arts	31.42	57.14	8.57	0	0
	Science	60.00	26.66	0	0	6.66
	Total	45.71	41.90	8.57	0	3.33
<b>Grand Total</b>		44.28	44.75	8.33	0	2.37

The table 100 revealed 31.42% arts and a significant 60.00% science student-teachers strongly agreed that I feel Facebook interaction will increase teachers' efficiency in teaching, with respect to stream 57.14% arts and 26.66% science student-teachers agreed and 40.00% male and 45.70% female student-teachers strongly agreed the statement. The data of gender 46.66% male and 48.56% female student-teachers whereas 44.28% student-teachers strongly agreed and 44.75% student-teachers agreed. This implies that a significant proportion of student-teachers favoring I feel Facebook interaction will increase teachers' efficiency in teaching.

**Table 101: Facebook instruction can engage learners more than other digital forms of learning.**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		0	86.66	13.33	0	0
Gender	Female	28.57	62.85	0	5.71	2.85
	Total	14.28	74.75	6.66	2.85	1.42
	Stream	Arts	25.70	65.71	5.71	2.85
Stream	Science	26.66	66.66	0	0	6.66
	Total	26.18	66.18	2.85	1.42	3.33
	Grand Total	20.23	70.46	4.75	2.13	2.37

The table 101 indicated 20.23% student-teachers strongly agreed and 70.46% student-teachers agreed that Facebook instruction can engage learners more than other digital forms of learning. The data about stream 0% male and 28.57% female student-teachers strongly agreed it and a majority 86.66% male student-teachers and 62.85% female student-teachers agreed whereas 25.70% arts stream and 26.66% science student-teachers strongly agreed and 65.71% arts and 66.66% science student-teachers agreed statement. It can be seen that Facebook instruction can engage learners more than other digital forms of learning.

**Table 102: Facebook integrates all forms of media, print, audio, video, animation etc. would be operated by me**

Gender	Male	SA%	A%	UN%	DA%	SDA%
		53.33	26.66	0	20.00	0
Gender	Female	19.99	57.14	14.28	2.85	5.71
	Total	35.66	41.90	7.14	11.85	2.85

<b>Stream</b>	<b>Arts</b>	25.71	42.85	17.14	8.57	5.71
	<b>Science</b>	26.66	66.00	0	6.66	0
	<b>Total</b>	26.18	54.42	8.57	7.61	2.85
<b>Grand Total</b>		30.92	48.16	7.85	9.73	2.85

The table 102 revealed that gender aspect 53.33% male strongly agreed and 19.99% female student-teachers agreed that Facebook integrates all forms of media, print, audio, video, animation etc. would be operated by me, With respect to stream 26.66% male and a majority 57.14% female student-teachers agreed it and figures about stream 25.71% arts and 26.66% science student-teachers strongly agreed the statement whereas 42.85% arts and 66.00% science student-teachers agreed. The grand total data 31.42% student-teachers strongly agreed and 48.16% student-teachers agreed that Facebook integrates all forms of media, print, audio, video, animation etc. would be operated by me. Thus a finding of table 100 in favor of the statement Facebook integrates all forms of media, print, audio, video, animation etc.

#### 4.5 Analysis of Achievement Test

**Table103: Pre-test mean scores of student-teachers under instruction through Facebook (experimental) method and conventional (control) method in educational psychology**

Group	N	df	M	S.D.	't' value	Significance @0.05 level
<b>Experimental</b>	50	49	15.16	3.38	0.13	Not significant
<b>Conventional</b>	50	49	13.86	3.66		

The above table 103 reported that pre-test mean scores of student-teachers under instruction through Facebook method is 15.16 and conventional method is 13.86. The values of SD are 3.38 and 3.66 respectively for instruction through Facebook method and conventional method in educational psychology. The obtained t value is 0.13 is less than the table value (2.01) at 0.05 level, therefore the stated hypothesis there is no significant difference between pre-test mean scores of student-teachers under instruction through Facebook (experimental) method and conventional (control) method in educational psychology accepted. The finding interpreted that in pre-test the performance of the students were same before teaching through experimental and conventional methods.



**Table 104: Post-test mean scores of student-teachers under instruction through Facebook method and conventional method in educational psychology**

Group	N	df	M	S.D.	't' value	Significance @0.05 level
Experimental	50	49	34.05	1.34	6.40	Significant
Conventional	50	49	27.68	1.65		

The above table 104 showed that post-test mean scores of student-teachers under instruction through Facebook method is 34.05 and conventional method is 27.68. The values of SD are 1.34 and 1.65 respectively for instruction through Facebook and conventional method in educational psychology. The obtained t value is 6.40 is greater than the table value (2.01) at 0.05 level, Therefore the stated hypothesis there is no significant difference between post-test mean scores of students under instruction through Facebook method and conventional method. Hence, there is significant difference between post-test mean scores of students under instruction through Facebook method and conventional method. It was concluded that the students who received the instruction through Facebook method was significantly better than the students who received the instruction through conventional method. This finding felt the effectiveness of the Facebook method of instruction as compared with the conventional method.

**Table105: Post-test mean scores of male and female student-teachers under instruction through Facebook method in educational psychology**

Group	No	df	M	S.D.	t	Significance
Male	15	14	33.06	1.16	0.12	Significant
Female	35	34	32.45	1.42		

It is felt from the above table 105 that post-test mean scores of male and female student-teachers under instruction through Facebook method were 33.06 and 32.45 respectively. The respective values of SD are 1.16 and 1.42 for post-test mean scores of male and female student-teachers under instruction through Facebook method. The obtained t value is 0.12 is less than the table value (2.01) at 0.05 level. Therefore, the stated hypothesis there is no significant difference between post-test mean scores of male and female student-teachers under instruction through Facebook method in educational psychology is accepted. Hence, there is no significant difference between post-test mean scores of male and female student-teachers under instruction through Facebook method, it was concluded that the male and female student-teachers who received the instruction through Facebook method equally done better.

**Table 106: Post-test mean scores of arts and science student-teachers under instruction through Facebook method in educational psychology**

Group	No	df	M	S.D.	t	Significance
Arts	35	34	32.45	1.42	0.12	Significant
Science	15	14	33.06	1.16		

The findings of the table: 106 showed that post-test mean scores of arts and science student-teachers under instruction through Facebook method are 32.45 and 33.06. The values of SD are 1.42 and 1.16 respectively for arts and science student-teachers under instruction through Facebook method. The obtained t value is 0.12 is less than the table value (2.01) at 0.05 level. Therefore, the stated hypothesis there is no significant differences between post-test mean scores of arts and science student-teachers under instruction through Facebook method in educational psychology accepted. Hence, there is no significant difference between post-test mean scores of arts and science student-teachers under instruction through Facebook method in educational psychology accepted, it was concluded that incase stream arts and science student-teachers who received the instruction through Facebook method was not significant. This finding revealed that Facebook method of instruction equally effective on both gender student-teachers of the experimental group.

**Table 107: Post-test mean scores of male and female student-teachers under conventional method of teaching in educational psychology**

Group	No	df	M	S.D.	t	Significance
Male	15	14	19.53	3.11	0.45	Significant
Female	35	34	18.77	3.43		

It is felt from table 107 that post-test mean scores of male and female student-teachers under instruction through conventional method is 19.53 is 18.77. The values of SD are 3.11 and 3.43 respectively for instruction through traditional method. The obtained t value is 0.45 is less than the table value (2.01) at 0.05 level, Therefore the stated hypothesis there is no significant difference between post-test mean scores of student-teachers under instruction through conventional method in educational psychology was accepted. Hence, there was no significant difference between post-test mean scores of students under instruction through conventional method in educational psychology, it was concluded that the male and female student-teachers who received

the instruction through conventional method was not significant for male and female. This finding indicated that effectiveness of the Facebook method of instruction as compared with the conventional method.

**Table 108: Post-test mean scores of arts and science student-teachers under conventional method of teaching in educational psychology**

Group	No	df	M	S.D.	T	Significance
Arts	35	34	18.77	3.43	0.45	Not Significant
Science	15	14	19.53	3.11		

The above table 108 shows that post-test mean scores of arts and science student-teachers under conventional method of teaching in educational psychology is 18.77 and conventional method is 19.53. The values of SD are 3.43 and 3.11 respectively for instruction through conventional method. The obtained t value is 0.45 is less than the table value (2.01) at 0.05 level, Therefore the stated hypothesis there is no significant difference between post-test mean scores of arts and science student-teachers under conventional method of teaching in educational psychology is accepted. Hence, there is no significant difference between post-test mean scores of arts and science student-teachers under conventional method of teaching in educational psychology, it was concluded that the arts and science student-teachers who received the instruction through conventional method was not significant.

**Table 109: Post-test mean scores of male student-teachers under instruction through Facebook method and conventional method in educational psychology**

Group	No	df	M	S.D.	t	Significance
Experimental	15	14	33.06	1.16	1.2	Significant
Conventional	15	14	19.53	3.11		

From the table: 109 it is felt that post-test mean scores of male student-teachers under instruction through Facebook method and conventional method in educational psychology are 33.06 and 19.53. The values of SD are 1.16 and 3.11 respectively for post-test mean scores of male students under instruction through Facebook method and conventional method. The obtained t value is 1.2 is less than the table value (2.01) at 0.05 level, therefore the stated hypothesis is there is no significant difference between post-test mean scores of male students under instruction through Facebook method and conventional method in educational psychology is accepted. Hence, there is

no significant difference between post-test mean scores of male student-teachers under instruction through Facebook method and conventional method, it was concluded that the student-teachers who received the instruction through Facebook method was not significantly better than the student-teachers who received the instruction through conventional method.

**Table 110: Post-test mean scores of female students under instruction through Facebook method and conventional method in educational psychology**

Group	No	df	M	S.D.	t	Significance
Experimental	35	34	32.45	1.42	2.26	Significant
Conventional	35	34	18.77	3.43		

The table: 110 indicated that post-test mean scores of female student-teachers under instruction through Facebook method is 32.45 and conventional method is 18.77. The values of SD are 1.42 and 3.43 respectively for instruction through Facebook and conventional method in educational psychology. The obtained t value is 2.26 is greater than the table value (2.01) at 0.05 level, therefore the stated hypothesis there is no significant difference between post-test mean scores of female students under instruction through Facebook method and conventional method in educational psychology rejected. Hence, there is significant difference between post-test mean scores of female student-teachers under instruction through Facebook method and conventional method in educational psychology, it was concluded that the student-teachers who received the instruction through Facebook method was significantly better than the students who received the instruction through conventional method. This finding shown that effectiveness of the Facebook method of instruction as compared with the conventional method in post-test for female.

**Table 111: Pre-test and post-test mean scores of student-teachers under instruction through Facebook method in educational psychology**

Group	No	df	M	S.D.	t	Significance
Pre-test	50	49	15.16	3.38	7.53	Significant
Post-Test	50	49	32.64	1.42		

The above table: 111 showed that post-test mean scores of student-teachers under instruction through Facebook method is 32.64 and conventional method is 15.16. The values of SD are 3.38 and 1.42 respectively for instruction through Facebook method and conventional method in educational psychology. Thus obtained t value is 7.53 is greater than the table value (2.01) at 0.05

level, therefore the stated hypothesis there is no significant difference between pre-test and post-test mean scores of students under instruction through Facebook method in educational psychology is rejected. Hence, there is significant difference between pre-test and post-test mean scores of student-teachers under instruction through Facebook method in educational psychology, it was concluded that the student-teachers who received the instruction through Facebook method in post-test was significantly better than the student-teacher who performed in the pre-test. This finding reported the effectiveness of the Facebook method of instruction in post-test as compared with the pre-test.

**Table 112: Pre-test and post-test mean scores of student-teachers under conventional method of teaching in educational psychology**

Group	No	df	M	S.D.	t	Significance
Pre-test	50	49	13.86	3.28	6.82	Significant
Post- Test	50	49	19	3.43		

The above table: 112 showed that mean score of student-teachers under instruction through conventional method in pre-test is 13.86 and post-test is 19. The pre-test and post-test values of SD are 3.28 and 3.43 respectively in educational psychology. The obtained t value is 6.82 is greater than the table value (2.01) at 0.05 level, Therefore the stated hypothesis there is no significant difference between pre-test and post-test mean scores of student-teachers under conventional method of teaching in educational psychology was rejected. Hence, there is significant difference between pre-test and post-test mean scores of student-teacher under conventional method of teaching in educational psychology, it was concluded that the student-teachers who received the instruction through conventional method in post-test performed significantly better than pre-test. This finding showed that effectiveness of the conventional method of instruction in post-test is better as compared with the pre-test.

**Table 113: Pre-test and post-test mean scores of arts student-teachers under instruction through Facebook method in educational psychology**

Group	No	df	M	S.D.	t	Significance
Pre-test	35	34	15.57	3.38	4.14	Significant
Post	35	34	32.45	1.42		

The table: 113 reported that pre-test mean scores of arts student-teachers under instruction through Facebook method is 15.57 and conventional method is 32.45. The values of SD for pre-test and post-test are 3.38 and 1.42 respectively for instruction through Facebook method in educational psychology. The obtained t value is 4.14 is greater than the table value (2.01) at 0.05 level, therefore the stated hypothesis there is no significant difference between pre-test and post-test mean scores of arts student-teachers under instruction through Facebook method in educational psychology is rejected. Hence, there is significant difference between pre-test and post-test mean scores of arts student-teacher under instruction through Facebook method in educational psychology. It was concluded that the arts student-teachers who received the instruction through Facebook method in post-test was significantly performed better than the student-teachers who performed in pre-test. This finding indicated the effectiveness of the Facebook method of instruction in post-test as compared with pre-test among arts student-teachers.

**Table 114: Pre-test and post-test mean scores of science student-teachers under instruction through Facebook method in educational psychology**

Group	No	df	M	S.D.	t	Significance
Pre-test	35	34	14.20	3.32	5.6	Significant
Post-test	35	34	33.06	1.16		

From the table: 114 it is felt that pre-test and post-test mean scores of science student-teachers under instruction through Facebook method in pre-test is 14.20 and post-test is 33.06. The values of SD are 3.32 and 1.16 respectively for pre-test and post-test mean scores of science student-teachers under instruction through Facebook method in educational psychology. The obtained t value is 5.6 is greater than the table value (2.01) at 0.05 level. Therefore, the stated hypothesis there is no significant difference between pre-test and post-test mean scores of science student-teachers under instruction through Facebook method in educational psychology is rejected. Hence, there is significant difference between pre-test and post-test mean scores of science student-teachers under instruction through Facebook method in educational psychology, it was concluded that the science student-teachers who received the instruction through Facebook method in post-test were significantly better than the pre-test. This finding shown the effectiveness of science student-teachers' in post-test through Facebook method of instruction as compared with the pre-test.

**Table 115: Pre-test and post-test mean scores of arts student-teachers under conventional method of teaching in educational psychology**

Group	No	df	M	S.D.	t	Significance
Pre-test	35	34	13.37	3.28	3.65	Significant
Post-test	35	34	18.77	3.43		

It was found that table: 115 showed that pre-test and post-test mean scores of arts student-teachers under instruction through conventional method are 13.37 and 18.77 respectively. The pre-test and post-post values of SD are 3.28 and 3.43 respectively for instruction through conventional method in educational psychology. The obtained t value is 3.65 is greater than the table value (2.01) at 0.05 level, Therefore the stated hypothesis there is no significant difference between pre-test and post-test mean scores of arts student-teachers under conventional method. Hence, there is significant difference pre-test and post-test mean scores of arts student-teachers under conventional method of teaching in educational psychology, it was concluded that the student-teachers who received the instruction through conventional method in post-test was significantly better than the pre-test.

**Table 116: Pre-test and post-test mean scores of science student-teachers under conventional method of teaching in educational psychology**

Group	No	df	M	S.D.	t	Significance
Pre-test	15	14	15.00	4.34	0.01	Significant
Post-test	15	14	19.53	3.11		

From the above table: 116 pre-test and post-test mean scores of science student-teachers under instruction through conventional method of teaching in educational psychology are 15.00 and 19.53 respectively. The values of SD are 4.34 and 3.11 respectively for instruction through conventional method in educational psychology. The obtained 't' value is 0.01 is less than the table value (2.01) at 0.05 level. Therefore, the stated hypothesis there is no significant difference between pre-test and post-test mean scores of science student-teachers under conventional method of teaching in educational psychology is accepted. Hence, there is no significant difference between pre-test and post-test mean scores of science student-teachers under conventional method of teaching in educational psychology, it was concluded that the student-teachers who

received the instruction through conventional method in post-test of instruction were not significantly better than pre-test.

**Table 117: Pre-test and post-test mean scores of male student-teachers under instruction through Facebook method in educational psychology**

Group	No	df	M	S.D.	t	Significance
Pre-test	15	14	12.93	3.15	8.21	Significant
Post-test	15	14	33.06	1.16		

The above table: 117 showed that pre-test and post-test mean scores of student-teachers under instruction through Facebook method in educational psychology is 12.93 and conventional method is 33.06. The pre-test and post-test values of SD are 3.15 and 1.16. The obtained t value is 8.21 is greater than the table value (2.01) at 0.05 level, therefore the stated hypothesis there is no significant difference between pre-test and post-test mean scores of male student-teachers under instruction through Facebook method in educational psychology rejected. Hence, there is significant difference between pre-test and post-test mean scores of male student-teachers under instruction through Facebook method in educational psychology, it was concluded that the student-teachers who received the instruction through Facebook method in post-test were significantly better than pre-test. This finding stated there was effectiveness of the Facebook method of instruction in post-test as compared with the pre-test.

**Table 118: Pre-test and post-test mean scores of female student-teachers under instruction through Facebook method in educational psychology**

Group	No	df	M	S.D.	t	Significance
Pre-test	35	34	16.11	3.38	5.51	Significant
Post-test	35	34	32.45	1.42		

The table: 118 reported that pre-test and post-test mean scores of female student-teachers under instruction through Facebook method in educational psychology are 16.11 and 32.45. The values of SD in pre-test and post-test are 3.38 and 1.42 respectively for instruction through Facebook in educational psychology. The obtained t value is 5.51 is greater than the table value (2.01) at 0.05 level, therefore the stated hypothesis there is no significant difference between pre-test and post-test mean scores of female student-teachers under instruction through Facebook method in educational psychology is rejected. It was concluded that the female student-teachers who



received the instruction through Facebook method in post-test was significantly better than the pre-test. This finally concluded that Facebook method of instruction for female student-teachers is more effective than pre-test.

**Table 119: Pre-test and post-test mean scores of male student-teachers under conventional method of teaching in educational psychology.**

Group	No	df	M	S.D.	t	Significance
Pre-test	15	14	15.46	4.64	0.02	Not Significant
Post-test	15	14	19.53	3.11		

From the table: 119 it was felt that pre-test and post-test mean scores of male student-teachers under instruction through conventional method were 15.46 and 19.53 respectively. The respective values of SD are 4.64 and 3.11. Thus the obtained t value is 0.02 is greater than the table value (2.01) at 0.05 level. Therefore, the hypothesis there was no significant difference between post-test mean scores of male student-teachers under instruction through conventional method in educational psychology was accepted. Hence, there is significant difference between pre-test and post-test mean scores of male student-teachers under conventional method of teaching in educational psychology. It was concluded that the student-teachers who received the instruction through conventional method in post- test was not significantly better than the pre-test.

**Table 120: Pre-test and post-test mean scores of female student-teachers under conventional method of teaching in educational psychology**

Group	No	df	M	S.D.	t	Significance
Pre-test	35	34	13.17	3.13	8.71	Significant
Post-test	35	34	18.77	3.14		

It is understood from the table 120 that pre-test and post-test mean scores of female student-teachers under instruction through conventional method of teaching in educational psychology are 13.17 and 18.77 respectively. The values of SD are 3.13 and 3.14 respectively for pre-test and post-test mean scores female student-teachers under instruction through conventional method. The obtained t value is 8.71 is greater than the table value (2.01) at 0.05 level, Therefore the stated hypothesis there is no significant difference between pre-test and post-test mean scores of student-teachers under instruction through conventional method in educational psychology was

rejected. Hence, there was significant difference between pre-test and post-test mean scores of female student-teachers under conventional method of teaching in educational psychology, it was concluded that the student-teachers who received the instruction through conventional method in post-test was significantly better than pre-test. This finding revealed that there was effectiveness of the conventional method of instruction in post-test as compared with the pre-test.

**5.0 Introduction**

The present chapter deals with the summary of the study along with the major findings. It also gives recommendations on the basis of these findings for further research.

**5.1 Statement of the Problem**

Facebook as an Instructional Tool in Fostering Academic Achievement, Social Interaction skills and Attitude towards use of Facebook

**5.2 Objectives of the Study**

The objectives 1 and 3 are assessed the construction and validation of scale on Facebook social interaction skills and its effectiveness, whereas objectives 2 and 4 construction and validation of scale on attitude towards use of Facebook of B.Ed. student-teachers and its effectiveness. The rest of the objectives related to the pre-test and post-test achievement tests.

1. Construction and validation of scale on Facebook social interaction skills of B.Ed. student-teachers.
2. Construction and validation of scale on attitude towards use of Facebook of B.Ed. student-teachers.
3. To study the effectiveness of social interaction skills of B.Ed. student-teachers through Facebook.
4. To study the attitude towards use of Facebook as an instructional tool of B.Ed. student-teachers.
5. To study the significant difference between pre-test mean scores of student-teachers under instruction through Facebook (experimental) method and conventional (control) method in educational psychology.
6. To study the significant difference between post-test mean scores of student-teachers under instruction through Facebook method and conventional method in educational psychology.

7. To study the significant difference between post-test mean scores of male and female student-teachers under instruction through Facebook method in educational psychology.
8. To study the significant difference between post-test mean scores of arts and science student-teachers under instruction through Facebook method in educational psychology.
9. To study the significant difference between post-test mean scores of male and female student-teachers under conventional method of teaching in educational psychology.
10. To study the significant difference between post-test mean scores of arts and science student-teachers under conventional method of teaching in educational psychology.
11. To study the significant difference between post-test mean scores of male student-teachers under instruction through Facebook method and conventional method in educational psychology.
12. To study the significant difference between post-test mean scores of female student-teachers under instruction through Facebook method and conventional method in educational psychology.
13. To study the significant difference between pre-test and post-test mean scores of student-teachers under instruction through Facebook method in educational psychology.
14. To study the significant difference between pre-test and post-test mean scores of student-teachers under conventional method of teaching in educational psychology.
15. To study the significant difference between pre-test and post-test mean scores of arts student-teachers under instruction through Facebook method in educational psychology.
16. To study the significant difference between pre-test and post-test mean scores of science student-teachers under instruction through Facebook method in educational psychology.
17. To study the significant difference between pre-test and post-test mean scores of arts students under conventional method of teaching in educational psychology.
18. To study the significant difference between pre-test and post-test mean scores of science student-teachers under conventional method of teaching in educational psychology.

19. To study the significant difference between pre-test and post-test mean scores of male student-teachers under instruction through Facebook method in educational psychology.
20. To study the significant difference between pre-test and post-test mean scores of female student-teachers under instruction through Facebook method in educational psychology.
21. To study the significant difference between pre-test and post-test mean scores of male student-teachers under conventional method of teaching in educational psychology.
22. To study the significant difference between pre-test and post-test mean scores of female student-teachers under conventional method of teaching in educational psychology.

### **5.3 Hypothesis of the Study**

1. There is no significant difference between pre-test mean scores of student-teachers under instruction through Facebook (experimental) method and conventional (control) method in educational psychology.
2. There is no significant difference between post-test mean scores of student-teachers under instruction through Facebook method and conventional method in educational psychology.
3. There is no significant difference between post-test mean scores of male and female student-teachers under instruction through Facebook method in educational psychology.
4. There is no significant difference between post-test mean scores of arts and science student-teachers under instruction through Facebook method in educational psychology.
5. There is no significant difference between post-test mean scores of male and female student-teachers under conventional method of teaching in educational psychology.
6. There is no significant difference between post-test mean scores of arts and science student-teachers under conventional method of teaching in educational psychology.
7. There is no significant difference between post-test mean scores of male student-teachers under instruction through Facebook method and conventional method in educational psychology.

8. There is no significant difference between post-test mean scores of female student-teachers under instruction through Facebook method and conventional method in educational psychology.
9. There is no significant difference between pre-test and post-test mean scores of student-teachers under instruction through Facebook method in educational psychology.
10. There is no significant difference between pre-test and post-test mean scores of student-teachers under conventional method of teaching in educational psychology.
11. There is no significant difference between pre-test and post-test mean scores of arts student-teachers under instruction through Facebook method in educational psychology.
12. There is no significant difference between pre-test and post-test mean scores of science student-teachers under instruction through Facebook method in educational psychology.
13. There is no significant difference between pre-test and post-test mean scores of arts student-teachers under conventional method of teaching in educational psychology.
14. There is no significant difference between pre-test and post-test mean scores of science student-teachers under conventional method of teaching in educational psychology.
15. There is no significant difference between pre-test and post-test mean scores of male student-teachers under instruction through Facebook method in educational psychology.
16. There is no significant difference between pre-test and post-test mean scores of female student-teachers under instruction through Facebook method in educational psychology.
17. There is no significant difference between pre-test and post-test mean scores of male student-teachers under conventional method of teaching in educational psychology.
18. There is no significant difference between pre-test and post-test mean scores of female student-teachers under conventional method of teaching in educational psychology.

#### **5.4 Methodology of the Study**

##### **5.4.1 Population**

The population of the study has covered pre-service secondary teacher trainees of Karnatak University, Dharwad in Karnataka State. There are about 34 affiliated B.Ed. colleges under the

Karnataka University, Dharwad. All the B.Ed. students of approximately 100 of Karnataka University, Dharwad formed the population of the study.

#### **5.4.2 Sample**

This research required Internet access and ICT connected technological gadgets. So the investigator had chosen his student-teachers of KSS Vijayanagar College of Education, Hubli, as a sample of experimental group where the researcher was working as assistant professor and student-teachers of KLE College of Education, Hubli as a sample of controlled group. Both the colleges are aided institution affiliated to Karnatak University, Dharwad.

All student-teachers in the both colleges were included in the sample and sample would be exactly one hundred taken from both colleges together. Fifty student- teachers for experimental group, KSS Vijayanagar College of Education, Hubli and fifty student- teachers for controlled group of KLE College of Education, Hubli.

#### **5.4.3 Methodology**

In the present study Quasi Experimental design has been employed and equivalent group has been made to equate the both groups.

#### **5.4.4 Sampling Technique**

Purposive sampling technique has been employed.

#### **5.4.5 Design of the Study**

This study is quasi experimental in nature. The Pre-test and Post-test Equivalent Groups Design was used. Purposive sampling method was employed. Random selection of the students is not possible because of situations. This design is often used in the classroom experiments when experimental and control groups are such naturally assembled groups as intact classes, which may be similar. Here the dependent variable is achievement in Educational Psychology subject, social interaction skills and attitude towards use of Facebook. Independent variable is Facebook method of teaching.

Population: 100 student-teachers of KUD

Sample: 50 student-teachers of KSS VCE as Experimental Group

And

50 student-teachers of KLE VCE as Conventional Group

Achievement Test: (Pre-test and Post-test administered to both samples)

50 student-teachers of KSS VCE as Experimental Group

And

50 student-teachers of KLE VCE as Conventional Group

Scale on Facebook Social Interaction Skills (administered to):

50 student-teachers of KSS VCE as Experimental Group

Scale on Attitude towards use of Facebook (administered to):

50 student-teachers of KSS VCE as Experimental Group

First pre-test was given to both experimental and control group. Then experimental group was given intervention. Finally, post-test was administered to both the groups. Any experimental design will have threats to its experimental validity i.e. to internal validity and external validity. The presence of control group will take care of threats to internal validity like maturation, history and testing.

#### **5.4.6 Tools**

##### **5.4.6.1 Achievement Test**

The meaning of academic achievement or academic performance is the outcome of education the extent to which a student, teacher or institution has achieved their educational objectives. Academic achievement is commonly measured by tests, examination or continuous assessment.

Achievement Test comprising of multiple choice objective items was structured based on content topic Unit-2: Child Development and Understanding the learner of Educational Psychology subject instructed through Facebook based methodology meant for B.Ed. Student-teachers of Karnataka University, Dharwad. The same test was used parallel form for the pre-test and post-test on both colleges' student-teachers under experimental and conventional method. First, the instructional objectives were prepared for each chapter. This would describe the type of performance pupils are expected to demonstrate. Then the course content was outlined which indicates the areas in which each type of performance is to be shown. Forty objective items were constructed. Answer keys were also prepared to maintain objectivity of scoring. The developed test was then given to experts for validation in terms of content, instruction, objectives etc. and based on the suggestions same was modified. A pilot study was also conducted on ten student-teachers of other B.Ed. colleges. The suggestions were incorporated and appropriate modifications were made and finalized. All the experts recommended that there were no changes to be made in the language used and instructions given to the test. The initial and final version of achievement test is attached in the Appendices.



#### **5.4.6.2 Scale of Facebook Social Interaction Skills**

This five point scale was developed and administered in post-test for experimental group student-teachers with five options SA for strongly agree, A for agree, UN for undecided, DA for disagree and SDA for strongly disagree. Scale on Facebook social interaction skills designed based on seven categories namely General, Entertainment, Student-Content Dimension, Student-Teacher Dimension, Student-Student Dimension, Dialogue Mode and Tutorial Mode. There were total fifty questions constructed together and listed under each category. The developed test was then given to experts for technical accuracy and composition editing. For the validation of test it was tried out on individual, the student was clearly told that he was not going to be tested but his help is sought in the modification of test, the modified draft was then tried on group of 10 students of small group and Based on small group try out the researcher then brought necessary structural changes in the test draft and went a step further for testing its validity in the real testing in students' field group other than the student-teachers' selected for the study.

A field study was used along with rating scale. Participant observation was also done. The tool was given to experts and based on their suggestions it was finalized. All experts commented that rating scale was lengthy and few items could be done away with as they were more or less similar in meaning to some other items. There were connections on language and instructions of the test.

#### **5.4.6.3 Scale of Attitude towards Use of Facebook**

This scale was administered to student-teachers of experimental group in post-test. Facebook attitude scale was designed with fifty statements with five options: SA for strongly agree, A for agree, UN for undecided, DA for disagree and SDA for strongly disagree. The developed statements were verified by experts about technical accuracy and composition editing. For the validation of test it was tried out on individual, the student was clearly told that he was not going to be tested but his help is sought in the modification of test, the modified draft was then tried on group of ten students of small group and Based on small group try out the researcher then brought necessary structural changes in the test draft and went a step further for testing its validity in the real testing in students' field group other than the student-teachers' selected for the study. The final draft was constructed after getting opinions, suggestions and feedback from students and experts.

#### **5.4.7 Data Collection**

The data was collected in the first semester of about six months i.e. January to May 2014 of the academic year 2013-14. The working days were from Monday to Saturday and about sixteen periods meant for the content topic: Child Development and Learning to teach. The duration of each period was one hour. Researcher adjusted the periods with the co-operation of staff member in his college whenever necessity arises apart from periods mentioned in the time table. The tools prepared for the study were validated by experts and based on given suggestions changes were incorporated. The tools administered to assess the content i.e. achievement test for pre-test and post-test, scale on Facebook social interactions skills to assess seven categories namely General, Entertainment, Student-Content Dimension, Student-Teacher Dimension, Student-Student Dimension, Dialogue Mode and Tutorial Mode and rating scale to know attitude towards use of Facebook. Before Facebook on-line method and conventional method of teaching pre-test was administered to both the groups. Then the topic: Child Development and Learning was taught to experimental group using the Facebook method and conventional method to control group. For this purpose content to be taught was analyzed thoroughly and then appropriate techniques chosen accordingly. After that, post-test was administered to students of both control and experimental group. In the post-test experimental student-teachers were assessed with scale on Facebook social interaction skills on seven categories and assessed students' attitude towards use of Facebook using Facebook attitude scale.

#### **5.4.8 Data Analysis**

In the present study, existing or intact groups were involved but treatments were assigned to them randomly and to take care that, analysis of t-test was used for analysis. For a study based on pre-test and post-test control group design. Differences in achievement of gender wise and stream wise analysis of data were also done using t-test. Scale on Facebook social interaction skills was used to assess student-teachers on seven elements of social interaction skills. General, Entertainment, Student-Content Dimension, Student-Teacher Dimension, Student-Student Dimension, Dialogue Mode and Tutorial Mode and rating scale to know attitude towards use of Facebook. Scoring was done accordingly and the corresponding average means of all the elements during each rating was done. Student-teachers attitude towards use of Facebook also assessed using rating scale. The data on students' reaction to attitude scale was analyzed using percentage.

## 5.5 Findings of the Study

1. The researcher has constructed and validated the scale on Facebook social interaction skills.
2. The researcher has constructed and validated the scale on attitude towards use of Facebook.
3. After implementation of Facebook based instructional method, student-teachers' reaction towards social interaction skills determined using Facebook social interaction rating scale. It was found that a significant proportion of student-teachers favored the Facebook as instructional tool in fostering social interaction skills. This further helped the student-teachers' academic achievement in educational psychology subject in the post-test.
4. The findings of Facebook attitude scale towards use of Facebook after the implementation of Facebook instruction method in the post-test, it can be concluded that a significant proportion of student-teachers of experimental group supported that attitude towards use of Facebook as instructional tool which directly increased the academic achievement of the student-teachers in educational psychology subject in the post-test.
5. It was found that there was no significant difference between pre-test mean scores of student-teachers under instruction through Facebook (experimental) method and conventional (control) method in educational psychology. It was interpreted that student-teachers' performance in the pre-test would be the same before implementing Facebook method and conventional method of instruction for both the experimental and conventional method students.
6. It was seen that there was significant difference between post-test mean scores of students under instruction through Facebook method and conventional method in educational psychology, it was concluded that the students who received the instruction through Facebook method was significantly better than the students who received the instruction through conventional method. This finding revealed that effectiveness of the Facebook method of instruction as compared with the conventional method.
7. There was no significant difference between post-test mean scores of male and female student-teachers under instruction through Facebook method in educational psychology. Hence it was concluded that Facebook based instructional method does not influence gender and it produces similar for positive results for male and female student-teachers of experimental group.

8. The finding stated that there was no significant difference between post-test mean scores of student-teachers under instruction through Facebook method in educational psychology with respect to the stream arts and science student-teachers. This finding revealed that Facebook method of instruction equally effective irrespective on student-teachers of both gender.
9. There was no significant difference between post-test mean scores of male and female student-teachers' under instruction through conventional method in educational psychology. It was concluded that the student-teachers who received the instruction through conventional method in educational psychology equally influenced both the gender.
10. It was seen that there was no significant difference between post-test mean scores of arts and science student-teachers under conventional method of teaching in educational psychology, it was concluded that conventional method of teaching equally influence student-teachers of arts and science stream and it produces similar results arts and science student-teachers.
11. It was reported that there was no significant difference between post-test mean scores of male student-teachers under instruction through Facebook method and conventional method in educational psychology, it was concluded that the male student-teachers who received the instruction through Facebook method were not significantly better than the student-teachers who received the instruction through conventional method.
12. It was revealed that there was significant difference between post-test mean scores of female student-teachers under instruction through Facebook method and conventional method in educational psychology subject, it was concluded that the female student-teachers who received the instruction through Facebook method were performed better than the student-teachers who received the instruction through conventional method. This finding revealed that there was effectiveness of Facebook method of instruction on female student-teachers as compared with conventional method in post-test.
13. It was found that there was significant difference between pre-test and post-test mean scores of student-teachers under instruction through Facebook method in educational psychology, thus it was concluded that the student-teachers who received the instruction through Facebook method in post-test were significantly performed better than the student-teacher who performed in the pre-test. This finding reported that Facebook method of instruction in post-test is more effective than pre-test.

14. There was significant difference between pre-test and post-test mean scores of student-teachers under conventional method of teaching in educational psychology subject. Hence, it was concluded that the student-teachers who received the instruction through conventional method in post-test performed significantly better than pre-test scores. Therefore, this finding revealed that there was effectiveness of the conventional method of instruction in post-test is better as compared with the pre-test.
15. The finding reported that there was significant difference between pre-test and post-test mean scores of arts student-teacher under instruction through Facebook method in educational psychology, it was concluded that the arts student-teachers who received the instruction through Facebook method in post-test were done significantly better than the arts student-teachers who performed in pre-test. This finding indicated that there was effectiveness of the Facebook method of instruction in post-test as compared with pre-test among arts student-teachers.
16. It was seen that there was significant difference between pre-test and post-test mean scores of science student-teachers under instruction through Facebook method in educational psychology, it was indicated that the science student-teachers who were under the instruction of Facebook method in post-test were significantly better than the student-teachers of pre-test. This finding supported the effectiveness of science student-teachers' in post-test through Facebook method of instruction as compared with the pre-test.
17. There was significant difference between pre-test and post-test mean scores of arts student-teachers under conventional method of teaching in educational psychology. Hence, there was significant difference between pre-test and post-test mean scores of arts student-teachers under conventional method of teaching in educational psychology subject, thus it was indicated that the student-teachers who received the instruction through conventional method in post-test were significantly better than the pre-test. This finding revealed that effectiveness of the conventional method of instruction in post-test as compared with the pre-test.
18. It was found there was no significant difference between pre-test and post-test mean scores of science student-teachers under instruction through Facebook method in educational psychology, hence it was concluded that science student-teachers who received the instruction through Facebook method in post-test were performed significantly better than pre-test. This finding reported that there was no effectiveness of the conventional method of instruction in post-test as compared with the pre-test.

19. It was indicated that there was significant difference between pre-test and post-test mean scores of male student-teachers under instruction through Facebook method in educational psychology. Hence, there is significant difference between pre-test and post-test mean scores of male student-teachers under instruction through Facebook method in educational psychology, it was reported that the male student-teachers who received the instruction through Facebook method in post-test were significantly better than pre-test.
20. The finding revealed that there was significant difference between pre-test and post-test mean scores of female student-teachers under instruction through Facebook method in educational psychology. It was concluded that the female student-teachers who received the instruction through Facebook method in post-test were significantly better than the pre-test.
21. The analysis of data reported that there was no significant difference between pre-test and post-test mean scores of male student-teachers under instruction through conventional method in educational psychology. It was concluded that the male student-teachers who received the instruction through conventional method of teaching were not better in post-test as compared to pre-test.
22. It was revealed that there was significant difference between pre-test and post-test mean scores of female student-teachers under conventional method of teaching in educational psychology subject. It was concluded that the female student-teachers who received the instruction through conventional method performed significantly better in post-test than pre-test.

#### **5.6 Recommendations**

On the basis of the findings of this study the following recommendations are given:

- Facebook method of online teaching as one of major strategies for Educational Psychology subject in B.Ed. Colleges.
- Syllabus should be framed in such a way that it gives ample scope for implementing Facebook method along with being able to be completed on time.
- Policy makers and institutional authorities should frequently conduct workshops and training programs on Facebook method of teaching, its implementation for teachers and encourage teachers for the same.
- Policy makers and institutional authorities should see it that appropriate tools needed for assessing students in Facebook method be designed by panel of experts and be

given to teachers of all colleges. This would help to reduce burden of teachers and maintain uniformity in assessments made by all teachers.

- Policy makers and institutional authorities should also see it that in colleges the number of student-teachers in a class is reduced, only then implementation of Facebook method will be possible.
- Teaching staff should be given opportunities to discuss with experts in the field of Facebook based instructional method whenever needed.
- Regular monitoring of Facebook method in colleges should also be done. An expert committee should make timely visits to schools and submit report on the issues and problems being faced while implementing Facebook method. This will help bring to limelight the major hindrances in the way of Facebook method and expert guidance can be sought for remedial measures for the same.
- Recognition and rewards be given to teachers who implement Facebook successfully and come up with ideas for the same. The techniques and guidelines used by such teachers should be made available to teachers of all schools for reference by higher authorities.
- Teachers should also be given a common platform wherein they can share their Facebook method experiences with each other and clarify doubts on the same.
- Policy makers and school authorities should design handbook on Facebook and distribute it to all teachers.
- Higher authorities should also try to locate and collaborate with those educational institutes abroad, wherein Facebook is being carried out effectively and regularly.
- Institutional authorities and teachers should build a strong alliance with parents by explaining to them the importance of Facebook method as well as challenges to be addressed while implementing it.
- Teachers should become aware of students' adjustments problems while working with Facebook group and provide ample guidance for the same.
- Teachers should address problems faced by students during Facebook method in class exploring students' concerns and, if necessary, meet with the school authorities, school counselor and parents of identified students to confront this issue.
- Teachers new to Facebook can start with those techniques of Facebook with which they feel most comfortable. During the initial stage, teachers should be more flexible with Facebook and make students feel comfortable. Students should be given time to understand and get adjusted with Facebook techniques.

- College counselors should collaborate with school officials to identify students experiencing problems.
- College counselors should conduct classroom guidance topics on working in groups and resolving conflicts in groups.
- College counselors should also practice different forms of relaxation techniques with students, as this will help them handle conflicts that arise in group works more easily.
- Students should be given more orientation on Facebook and its implementation, its advantages and challenges to be faced while implementing Facebook.
- Parents should make that sure their children attend school regularly. They should evaluate their children's academic progress over a period of time.
- Parents should talk with their children and encourage them to do their best. They should not compare child's performance with that of others.
- Parents should be proactive and contact school officials if they have issues concerning Facebook.

Apart from Educational Psychology, Facebook can also be used for teaching other subjects and at different class levels as it can be clearly seen from the review of related literature that Facebook has been found to be an effective teaching strategy for all subjects and at all levels.

#### **5.7 Suggestions for Further Research**

The present study was an effort to find out effectiveness of Facebook method in Educational Psychology subject of B.Ed. course under Karnatak University, Dharwad. There are however many other situations wherein one can further explore the effectiveness of Facebook instruction method. The following are a few suggestions for further studies that can be taken upon Facebook method:

- The effectiveness of Facebook method can be studied in other subjects.
- Studies can be conducted at various grade levels.
- Similar studies can be conducted in other universities.
- The effect of Facebook method can be carried out in CBSE, ICSE and state run Schools, etc.
- The present study was conducted on English medium students. Studies can be taken up in schools with regional language as medium of instruction.
- Studies with increased duration can be taken up.
- Research may be conducted to study the level of concept retention of students undergoing Facebook method and conventional method.
- The effect of Facebook method on low, average and high achievers can be studied.



- Research can also be undertaken to study the extent to which Facebook method formally and informally effective.
- Studies may be undertaken to see if Facebook method helps in developing in students, life skills, social skills and soft skills.
- A comparative study only can be undertaken with respect to the effectiveness of different techniques of Facebook method.
- The effectiveness of Facebook method with respect to different subjects can also be studied.

#### **5.8 Conclusion**

It can be therefore seen from the present study that Facebook method helped in increasing achievement in Educational Psychology subject than the traditional method of teaching. It helped student-teachers to enhance their various elements of social interaction skills and the number of elements of attitude towards use of Facebook. The study clearly shows that Facebook is an effective teaching strategy which is not only helps in academic gains but also in developing the aspects of the learner, which at present, is the need of the hour. Implementing Facebook method and assessing needs a lot of patience and time and is not an easy task. Only with the joint efforts of school authorities, teachers, students and parents, can these goals of Facebook method be achieved. So it is high time that more researches be done to investigate these areas in depth. The present study is a step made in this regard. The findings of such studies can help teachers, parents, students and others involved in the educational field to cope with the present problems and issues being faced while implementing Facebook formally and informally, and thus exploit the benefits of Facebook method to maximum.

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