

# Methods in University Teaching

Khalil Alsaadat

Dept. of Educational Policies, College of Education, King Saud University, Riyadh, Saudi Arabia

---

## 1. INTRODUCTION

For many professors, teaching consists only of lectures, assignments given to students, and a final exam. But there are other teaching strategies which can be incorporated with and within the lecture format in order to stimulate, motivate and foster student learning. The more teaching strategies you have at your disposal, the more flexible you are in your content delivery. In order to identify the strategies that are suitable for your course and that will meet your instructional objectives, you may ask yourself the following questions:

When should I lecture, and when would hold a discussion work better?

When should I show students how to do something, and when should I encourage them to try it themselves?

When should I respond to a student question (give information) and when should I encourage other students to respond (give student the opportunity to practice skills)?

If I see someone make a mistake in lab, should I correct the mistake, or should I let the student discover it?

When should I review important concepts orally, and when should I use handouts?

If I need to show students a lot of formulas or graphs, should I derive or draw them during class, or prepare hand outs/overhead transparencies and discuss them?

When should I rely on my own expertise, and when should I seek outside sources (films, slide/tape programs, guest speakers, etc.)?

How might I use quotes from others? This is a simple and fast way of bringing "another" voice into the lecture hall.

When should I use web resources such as Sakai to augment my course and accept course discussions?(Brok university, <http://kumu.brocku.ca>)this paper discusses various methods of university teaching including distance learning, e learning , m learning. Literature will be reviewed regarding these methods, implications and conclusion will be drawn and recommendations will be suggested.

## 2. UNIVERSITY TEACHING METHODS

### LECTURE:

Lecture is a teaching method where an instructor is the central focus of information transfer. Typically, an instructor will stand before a class and present information for the students to learn. Sometimes, they will write on a board or use an overhead projector to provide visuals for students. Students are expected to take notes while listening to the lecture. Usually, very little exchange occurs between the instructor and the students during a lecture (KELLY,2013).

### Learning contrast:

Learning contracts are argued to be the most important tool for successful and positive independent study experiences for both students and advising faculty members. Learning contracts should be constructed by the student and reviewed by the advising faculty member for constructive feedback and suggestions for modification. A final version of the learning contract should be signed by both student and advising faculty member. The contract then serves as an outline for the

independent study units and a tool to aid evaluation. Modification of the learning contract may become necessary as the learning experience progresses. Modified contracts should be approved and signed by both student and advising faculty member (center for teaching excellence).

#### **Group Discussions:**

Description: Opportunity to pool and test ideas, experience and knowledge.

When Used: Any time greater group participation is desired.

Procedure: Requires pre-planned outline. Facilitator encourages and guides participation.

Limitations: Practical only with no more than 20 participants. Becomes disorganized without careful planning of material to be covered and skillful direction from the facilitator (Brock university).

#### **Buzz Groups:**

Description: Allows total participation by group members through small subgroups of participants, followed by discussion among the entire group.

When Used: Use in conjunction with other group methods when participation from every group member is desired.

Procedure: Prepare one or two questions on the topic to give to each group. Divide the members into small subgroups of four to six individuals. A leader is chosen in each subgroup to record and report pertinent ideas to the whole group.

Limitations: Thought must be given to the purpose and organization of the groups(Brock university).

#### **Mobile learning:**

The term "Nomadic" has been used to describe the current college students' culture of wireless and mobile connectedness in the sense that they are not "rooted" but incredibly flexible and fluid when it comes to their social connections and their virtual life culture(Reyard,2008).She said This refers not only to their uses of social networking tools but also to the reality that they are connected wirelessly in any situation and for any reason. They are essentially nomads when it comes to their life "space" (Reynard,2008). Mobile technologies such as mobile phones, smart phones, personal digital assistants and mP3 players support learners on the move, whereas technologies such as laptops, digital cameras, desktop computers do not. Commuters engage in mobile learning as they travel to and from work accessing different information and engaging in different tasks, returning to these tasks at different times throughout the day (Herrington et al,2009).Reynard discussed the issue of nomadic she said Bryan Alexander, in his article, Going Nomadic: Mobile Learning in Higher Education (2004) says, "More broadly, mobile and wireless computing has altered the rhythms of social time and has changed uses of social space." (p.28) Within higher education, instructors are beginning to realize the impact of this both positively and negatively in creating communities of learners within their courses. Students bring to the course an extensive network of information input, peer connections, and the potential of a wider scope of application than what has been the case until now. The negative side of things is the challenge of "managing" not only the multitasking of the students but their insistence upon continual connectivity even when participating in a physical learning space with an instructor and other physical peers around them. Some instructors have seen this as something to be controlled through disabling access for the duration of the class while others are trying to integrate this reality into the learning environments (Alexander, 2004).

#### **Distance education:**

Within a context of rapid technological change and shifting market conditions, the education system is challenged with providing increased educational opportunities without increased budgets. Many educational institutions are answering this challenge by developing distance education programs. At its most basic level, distance education takes place when a teacher and student(s) are separated by physical distance, and technology (i.e., voice, video, data, and print), often in concert with face-to-face communication, is used to bridge the instructional gap. These types of programs can provide adults with a second chance at a college education, reach those disadvantaged by limited time, distance or physical disability, and update the knowledge base of workers at their places of employment (university of Idaho guidelines) .The following discussion is taken entirely from the university of Idaho guidelines on distance education strategies which is based on the work of Banchar,1989,Gram&Wedman,1989,Holmberg,1985,Moor&Thompson and Quigley&Goff,1990

and Willis, 1993. They started by asking why teach at a distance. Many teachers feel the opportunities offered by distance education outweigh the obstacles. In fact, instructors often comment that the focused preparation required by distance teaching improves their overall teaching and empathy for their students. The challenges posed by distance education are countered by opportunities to:

- Reach a wider student audience.
- Meet the needs of students who are unable to attend on-campus classes.
- Involve outside speakers who would otherwise be unavailable.
- Link students from different social, cultural, economic, and experiential backgrounds.

#### **Improving Planning and Organization:**

In developing or adapting distance instruction, the core content remains basically unchanged, although its presentation requires new strategies and additional preparation time. Suggestions for planning and organizing a distance delivered course include:

- Begin the course planning process by studying distance education research findings. There are several research summaries available (see Moore & Thompson, 1990).
- Before developing something new, check and review existing materials for content and presentation ideas.
- Analyze and understand the strengths and weaknesses of the possible delivery systems available to you (e.g., audio, video, data, and print) not only in terms of how they are delivered (e.g., satellite, microwave, fiber optic cable, etc.), but in terms of learner needs and course requirements before selecting a mix of instructional technology.
- Hands-on training with the technology of delivery is critical for both teacher and students. Consider a pre-class session in which the class meets informally using the delivery technology and learns about the roles and responsibilities of technical support staff.
- At the start of class initiate a frank discussion to set rules, guidelines, and standards. Once procedures have been established, consistently uphold them.
- Make sure each site is properly equipped with functional and accessible equipment. Provide a toll-free "hotline" for reporting and rectifying problems.
- If course materials are sent by mail, make sure they are received well before class begins. To help students keep materials organized, consider binding the syllabus, handouts, and other readings prior to distribution.
- Start off slowly with a manageable number of sites and students. The logistical difficulties of distant teaching increase with each additional site.

#### **Meeting Student Needs:**

To function effectively, students must quickly become comfortable with the nature of teaching and learning at a distance. Efforts should be made to adapt the delivery system to best motivate and meet the needs of the students, in terms of both content and preferred learning styles. Consider the following strategies for meeting students' needs:

- Assist students in becoming both familiar and comfortable with the delivery technology and prepare them to resolve the technical problems that will arise. Focus on joint problem solving, not placing blame for the occasional technical difficulty.
- Make students aware of and comfortable with new patterns of communication to be used in the course (Holmberg, 1985).
- Learn about students' backgrounds and experiences. Discussing the instructor's background and interests is equally important.
- Be sensitive to different communication styles and varied cultural backgrounds. Remember, for example, that students may have different language skills, and that humor is culturally specific and won't be perceived the same way by all.

- Remember that students must take an active role in the distance delivered course by independently taking responsibility for their learning.
- Be aware of students' needs in meeting standard university deadlines, despite the lag time often involved in rural mail delivery.

### **Use Effective Teaching Skills:**

For the most part, effective distance teaching requires the enhancement of existing skills, rather than developing new abilities. Pay special attention to the following:

- Realistically assess the amount of content that can be effectively delivered in the course. Because of the logistics involved, presenting content at a distance is usually more time consuming than presenting the same content in a traditional classroom.
- Be aware that student participants will have different learning styles. Some will learn easily in group settings, while others will excel when working independently.
- Diversify and pace course activities and avoid long lectures. Intersperse content presentations with discussions and student-centered exercises.
- Humanize the course by focusing on the students, not the delivery system.
- Consider using a print component to supplement non-print materials (see Graham & Wedman, 1989).
- Use locally relevant case studies and examples as often as possible to assist students in understanding and applying course content. Typically, the earlier in the course this is done, the better.
- Be concise. Use short, cohesive statements and ask direct questions, realizing that technical linkages might increase the time it takes for students to respond.
- Develop strategies for student reinforcement, review, repetition, and remediation. Towards this end, one-on-one phone discussions and electronic mail communication can be especially effective.
- And finally...relax. Participants will quickly grow comfortable with the process of distance education and the natural rhythm of effective teaching will return.

### **Improving Interaction and Feedback:**

Using effective interaction and feedback strategies will enable the instructor to identify and meet individual student needs while providing a forum for suggesting course improvements. To improve interaction and feedback, consider the following:

- Use pre-class study questions and advance organizers to encourage critical thinking and informed participation on the part of all learners. Realize that it will take time to improve poor communication patterns.
- Early in the course, require students to contact you and interact among themselves via electronic mail, so they become comfortable with the process. Maintaining and sharing electronic journal entries can be very effective toward this end.
- Arrange telephone office hours using a toll-free number. Set evening office hours if most of your students work during the day.
- Integrate a variety of delivery systems for interaction and feedback, including one-on-one and conference calls, fax, E-mail, video, and computer conferencing. When feasible, consider personal visits as well.
- Contact each site (or student) every week if possible, especially early in the course. Take note of students who don't participate during the first session, and contact them individually after class.
- Use pre-stamped and addressed postcards, out-of-class phone conferences, and e-mail for feedback regarding course content, relevancy, pace, delivery problems, and instructional concerns.

- Have students keep a journal of their thoughts and ideas regarding the course content, as well as their individual progress and other concerns. Have students submit journal entries frequently.
- Use an on-site facilitator to stimulate interaction when distant students are hesitant to ask questions or participate. In addition, the facilitator can act as your on-site "eyes and ears".
- Call on individual students to ensure that all participants have ample opportunity to interact. At the same time, politely but firmly discourage individual students or sites from monopolizing class time.
- Make detailed comments on written assignments, referring to additional sources for supplementary information. Return assignments without delay, using fax or electronic mail, if practical.

Previous studies concerning various university teaching methods :

#### **Geng study:**

Nowadays, teaching and learning have been shifted from traditional classrooms to technology-supported learning environment. By offering a convenient, efficient and financially affordable information technology learning environment, mobile learning is a topic that is of considerable interest for education audiences owing to the pervasive nature of text messaging. This study investigated tertiary students' use of text messaging in mobile learning and related areas such as their literacy levels and years of using text messages. Given the use of such technology in classrooms today, this study is timely and makes its contribution to what is naturally scant literature in this area. Data were gathered by way of a questionnaire and text message exercises. Fifty-three students participated in this study. The results shed light on whether or not text messaging is positively or negatively related to students' self-rated reading and writing attainment. Also revealed is whether or not there are differences between students at different levels, that is, whether first-year undergraduate students use text messaging differently, and if so in what ways, than undergraduate students who are nearer the end of their studies and postgraduate students. This article offers insight into the implications of successful mobile learning upon a contemporary account of practices and how we educators might use text messaging in mobile learning.

#### **Kember, Hong, Ho study:**

The study looks at issues around the power of the hidden curriculum of assessment and its effects on student behaviour. The assessment regime at school level has an impact on study approaches at university level, and if we are to help students to make the transition from school to university, then it is important that we understand the beliefs and behaviours involved. The study looks at changes in behaviour in the light of beliefs about knowledge and their understanding about knowledge, that is, their epistemological beliefs, which are a pre- or co-requisite to learning in a manner consistent with the requirements of a discipline. Drawing on the literature from the transition from school- to university-level study, focus group interviews were conducted with 110 final-year students at two universities in Hong Kong in order to look at the adaptations made by students used to a particular assessment regime at school level and who, like students in all cultures, need to become more independent in their learning and to develop confidence. For students to successfully make the transition, first, they had to be exposed to issues or problems with multiple positions. Second, there needed to be active engagement through learning activities with the problems or issues

#### **Jonsoon study:**

Although feedback has a great potential for learning, students do not always make use of this potential. This article therefore reviews research literature on students' use of feedback in higher education. This is done in order to find answers as to why some students do not use the feedback they receive and which factors are important in influencing students' use of teacher feedback. Findings show that utility is not only a key feature for students' use of feedback but also that some factors, such as lack of strategies for productively using feedback or lack of understanding of academic discourse, may hinder students' possibilities to use the information formatively

#### **Warburton and Volt study:**

This article presents the findings of an empirical study that examined the learning value of a novel group assessment activity aimed at promoting first-year students' development of basic self-directed learning skills required for university

study. A content quiz group learning assignment was designed to enhance students' capacity to ask appropriate questions to guide their enquiry, identify appropriate resources and tools, and draw links between different learning resources, all skills embedded within their learning in a science unit. Questionnaire data and written reflections revealed the extent to which students used core, accessory and optional resources to complete this assignment, which specific resources were perceived as most useful for what aspects of their content learning, and how strategy use was related to achievement. Metacognitive experiences expressed in the open questions and assessed reflections revealed students' emerging awareness of how their approach to study impacted on the quality of their learning.

Christensen and his colleagues, 2011 provided some recommendations for policy makers they said policy makers should :

- **Eliminate barriers that block disruptive innovations and partner with the innovators to provide better educational opportunities.** It is critical to promote new, autonomous business models that have the freedom to re-imagine higher education. Policymakers should not frame the disruptive players as threats, and instead see them as opportunities to bring affordable education to more people.
- **Remove barriers that judge institutions based on their inputs such as seat time, credit hours, and student-faculty ratios.** Too many of the disruptive innovations in higher education still focus on inputs and are time based. Policymakers should open up the policy environment to allow more institutions to use online education to move toward next-generation learning models focused around things such as competency-based learning with actionable assessments, not just make the traditional model of education more convenient.
- **Not focus on degree attainment as the sole measure of success.** Degrees are a proxy for skill attainment, but they are far from a perfect one, as seen in the amount of retraining that employers do as well as the current unemployment figures. Real outcomes and real mastery—as often shown in work portfolios for example—are more important.
- **Fund higher education with the aim of increasing quality and decreasing cost.** Policymakers should change access to federal funding from the all-or-nothing one of today to a sliding scale based on how one does relative to its peers on these dimensions. We call the formula we propose to jumpstart this policy a QV Index. The QV Index formula is composed of the 90-day hire rate plus change in salary over some amount of time divided by total revenue per conferral plus retrospective student satisfaction plus the cohort repayment rate indexed to credit scores.

**Recognize the continued important of research institutions:** These institutions of higher education remain vital—indeed those that focus on research as well as those that train people for the academy will still be critically important for the country's future. Most of America's elite colleges and universities will continue to fulfill this job. But we should no longer force those institutions that are focused on teaching and learning to compete on the same metrics and play by the same rules. Pushing these institutions to adopt a mission of knowledge creation has created institutions that have two conflated value propositions and business models—and added significant overhead costs. We need institutions focused solely on knowledge proliferation—and need to regard those that do a good job on this dimension as being of high quality at what they were meant to do.

Christensen and his colleagues, 2011, also gave some recommendations for institutions of higher education as follows:

- **Apply the correct business model for the task.** These institutions have conflated value propositions and business models, which creates significant, unsustainable overhead costs.
- **Drive the disruptive innovation.** Some institutions have this opportunity, but to do so, they need to set up an autonomous business model unencumbered by their existing processes and priorities. They can leverage their existing fixed resources in this autonomous model to give themselves a cost advantage over what to this point have been the low-cost disruptive innovators.
- **Develop a strategy of focus.** The historical strategy of trying to be great at everything and mimic institutions such as Harvard is not a viable strategy going forward.
- **Frame online learning as a sustaining innovation.** Institutions can use this new technology to disrupt the existing classroom model to extend convenience to many more students as well as provide a better learning experience.

## REFERENCES

- [1] Reynard Ruth,2008," mobile learning in higher education multiple connections in customized learning spaces, campus technology ,campus technology.com
- [2] Herrington , j ., Herington, A ., mantie,J ., Olney, I., & Ferry,B., 2009 " New technologies new pedagogies : mobile learning in higher education" ,wollongong, university of wollongong. Summarized by Center for learning ,mobile learning ,curtin.edu.au
- [3] Christensen, C.M., Horn, M.B., Caldera, L. & Soares, L. (2011). *"Disrupting college: How disruptive innovation can deliver quality and affordability to postsecondary education"*. Center for American Progress and Inn sight Institute.
- [4] Geng, Gretchen, 2013, "investigating the use of text messages in mobile learning", active learning in higher education, march,vol 14,no 1,pp77-87.
- [5] Kember, David, Hong, Celena , Ho Amaly, 2013. "formal models answers to multiple perspectives: adapting study approaches to suit university study", active learning in higher education ,vol 14,no 1,pp23-35.
- [6] Jonsson, anders, 2013,facilitating productive use of feedback in higher education,active learning in higher education ,vol 14, no 1, pp63-67.
- [7] Waburton , natalie .Volt simon,2012,"enhancing self directed learning through a content quiz group learning assignment ,active learning in higher education,pp9-22.
- [8] Clayton m, Christensen , Michael B., Horn, Louis Soares and Louis Caldera,2011,"Disrupting college how disruptive innovation can deliver quality and affordability to post secondary education, enter for American progress.
- [9] Kelly, Melissa, lecture pros and cons, About.com secondary education, retrieved may 29 ,2013.
- [10] Center for teaching excellence, self directed learning: learning ontracts, university of water loo ,retrived may 15,2013.
- [11] Brock university, 2001,"teaching methods and strategies", excerpt from, phill. The lecturer's toolkit.
- [12] University of idahoo, "engineering out reach,distance education at a glance, guide 1, distance education an overview ,edited by Tania H. Gottschalk.