EXPOSURE TO SOME FAITH AND LEARNING INITIATIVES AT A UNIVERSITY IN EAST AFRICA\(^1\)

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ABSTRACT
The purpose of this article is to expose readers to different initiatives in the area of faith and learning at St. John’s University of Tanzania in East Africa. These initiatives are related to the science discipline. After an introduction the article proceeds by clarifying the terminology ‘integration’ and ‘holistic’ which are used ubiquitously in Christian Higher Education. This followed by a brief discussion of the following initiatives which are at various stages of development:
- African Journal for Transformational Scholarship (AJTS)
- Current Perspectives on Science and Faith in Tanzania
- Science, Faith and Culture
- Drugs, Religion and Chemistry in Tanzania: An Interactive Seminar for Chemistry Students
- SJUT Views of Science and Religion Survey 2015
- Towards A Christian Response to Traditional African Medicine in Tanzania
- A Technique for Implementing Faith-Shaped Learning using Resources from the Christian Tradition

The hope is that others may ‘learn from’ and ‘be inspired by’ these initiatives and strive to develop their own, within their discipline, to the glory of God and the building of His kingdom.

KEWORDS: Christian education, faith and learning, holistic education, integration, science.

INTRODUCTION
What does a Christian University in Africa look like today? There can be a number of models, but one would hope that common to them all would be an explicit commitment to crafting and shaping our learning from a Christian perspective. The aim is to develop staff and students ‘to think Christianly’ in relation to

\(^1\) This paper is based on a keynote talk presented at the ‘Inaugural St. John’s University of Tanzania Research Conference’, 21-23\(^{rd}\) July, 2015.
specific disciplines. ‘Thinking Christianly’ has been discussed by various writers.\textsuperscript{2-3} I believe it can be usefully defined as ‘thinking widely about all of life, within a biblical framework and with spiritual wisdom’. This definition can be extracted from the Apostle Paul’s words in 2 Corinthians 10:5 (We demolish arguments and every pretension that sets itself up against the knowledge of God, and we take captive every thought to make it obedient to Christ) and 1 Corinthians 2:13 (This is what we speak, not in words taught us by human wisdom but in words taught by the Spirit, explaining spiritual realities with Spirit-taught words). Thinking Christianly is not just thinking biblically in the sense of knowing and thinking about the Bible. It is much broader than this, connecting biblical principles to all spheres of life, such as work, education, politics, relationships, health, economics, and so on. The focus of this paper is ‘thinking Christianly’, but of course our Christian faith and Christian knowledge should lead to appropriate ‘Christian actions’. A transformation of heart would be expected which bears fruit in our daily life. Paul states that knowledge puffs up while love builds up (1 Corinthians 8:1). James says that one who hears the word but does not do it deceives himself (James 1:22). The richness of a godly life comes when in humility we take the ‘little’ knowledge we have and with God’s enabling seek to use and apply it. It is in the weakness of our efforts that He demonstrates His strength, and brings forth His kingdom on this earth (2 Corinthians 12:9). We are His handiwork (Ephesians 2:10). We are the vessels of clay through whom His power is displayed (2 Corinthians 4:7). Observing the Lord working in our life, although often humbling, should be uplifting and spur us on as believers.

This paper starts with a discussion of some traps with common terminology used in Christian education followed by an overview of some faith and learning initiatives at St. John’s University of Tanzania (SJUT), Dodoma Tanzania. These are what I have personally been involved with and so do not constitute a comprehensive look at faith and learning activities at SJUT.

TERMINOLOGY IN CHRISTIAN EDUCATION

I believe that ‘Integration of Faith and Learning’ and ‘Holistic Education’ are two terms commonly used in Christian education which can easily give the wrong message.

There are multiple paradigms for faith and learning and ‘Integration of Faith and Learning’ is one of them.\textsuperscript{4} Why do we talk about the ‘Integration of Faith and Learning’? This leads to the natural assumption that faith and learning are two separate domains that need to somehow be combined or stitched together. Surely this is not the image we wish to present of the ‘integration of faith and learning’. The very language of ‘integration’ may subtly reinforce the very dualism that we want to overcome. That is the idea that they are two opposed or contrasted aspects. Rather, regard views from different knowledge areas as complementing each other, giving one universal truth, God’s truth or God’s knowledge.\textsuperscript{5} According to Colossians 1:15-17 Jesus Christ is maker and maintainer of ‘all things’ which includes ‘knowledge’ or ‘truth’.

One result of the Enlightenment (end of the 17th century) was to divide Faith and Learning into distinctive areas or parts of life. Before this time there was little controversy about the relationship between faith and learning, for they were assumed to be one and the same. With the advent of the modern world, objective and subjective realms, faith and learning, the sacred and the secular, were all separated and


\textsuperscript{3} J Morrow, Think Christianly: Looking at the Intersection of Faith and Culture, Zondervan, Grand Rapids, 2011.


assumed different roles, responsibilities and locations. When we think about the word ‘university’, we should not first and foremost think of the typical research university model with its isolated disciplines, but rather of the original, medieval, Christian definition of the term which meant an inclusive association of students and teachers guided by divine wisdom.

To conclude this topic rather than use the term ‘Integration of Faith and Learning’ and in order to express the ‘Unity of Knowledge’ I would recommend talking in terms of the ‘Complementarity of Faith and Learning’ or the ‘Harmony between Faith and Learning’.

Moving on to ‘Holistic Education’. This is a term where there is no one definition with different institutions tending to have their own definition. Generally it is regarded as a philosophy of education based on the premise that each person finds identity, meaning, and purpose in life through connections to the community, to the natural world, and to spiritual values such as compassion and peace. It is concerned with the development of every person’s emotional, social, physical, artistic, creative, spiritual as well as intellectual potentials. Therefore, holistic education can be essentially humanistic with spirituality added. That is people-centered and detached from a relationship with a Creator God. People are encouraged to believe in themselves, not God. Furthermore, the spirituality is not necessarily Christian and is often in terms of practices like yoga seeking harmony between the inner life and outer life.

Therefore, it would seem to be important to have a well thought out definition for what is understood as ‘Holistic Christian Education’. Fundamentally, I would suggest that it should be Christ-centered and with the following attributes:

1) The Human Being Is Regarded As A Whole Person Created In The Image Of God
In other words the person is not fragmented into parts such as emotional, social, physical, artistic, creative, spiritual and intellectual. Each aspect of the human is important to every other aspect. God fills the earthly form with spirit (human spirit) creating man as a whole person: Then the Lord God formed a man from the dust of the ground and breathed into his nostrils the breath of life (Genesis 2:7). Because man is a whole person, it is not accurate to teach that spirit, soul, and body are separate parts of man. The Bible uses all these terms, but in such a way that they are distinguished (not separated) as different functioning structures in the unity we call a person. Humanity is a complex unity where we identify the self with the Greek term pneuma meaning breath (the human spirit), standing for the self-conscious centre of all experience. The mental processes and functions thinking, feeling, willing, and perceiving, we designate by the Greek term psyche, meaning soul. The Greek word soma is used for body structure and function.

The human spirit can be made alive by receiving new life in Christ. When we receive this new spirit, we also receive the Holy Spirit of God to dwell within us. Do you not know that your bodies are temples of the Holy Spirit, who is in you, whom you have received from God? You are not your own (1 Corinthians 6:19). Therefore, our spirit begins to take on the attributes of the Holy Spirit. And man is uniquely the image of God because has a spirit, even when apart from God.

In Paul’s letter of encouragement to the Christians living in Thessalonica, he addresses an aspect of their wholeness when he prays for them: May God himself, the God of peace, sanctify you through and through. May your whole spirit, soul and body be kept blameless at the coming of our Lord Jesus Christ. The one who calls you is faithful, and he will do it (1 Thessalonians 5:23-24). Used as an adjective, the

word whole comes from the Greek words of *holos* and *holokleros* meaning all, entire and complete.⁸ These two words come from the noun *holokleria* meaning completeness. Paul refers to the three major aspects of man’s being – his spirit, soul and body. We are not beings of separate and distinctively different components, but a whole person. We are a spirit which has a soul that lives in a body. All of these aspects of man are interwoven and cannot be separated. To be whole, to be complete, each aspect of a person must be thriving. When any aspect of our being is not thriving, then the other aspects are affected.

It appears from the Bible that the soul and spirit are the primary immaterial aspects of humanity. However, the mind (*nous* or *dianoia*) and heart (*kardia*) are other significant immaterial aspects and how all four interrelate causes much debate (for example: N. T. Wright⁹) and would be a lengthy analysis not to be entered into here. The fact that Jesus said Love the Lord your God with all your heart and with all your soul and with all your mind and with all your strength (Mark 12:30) suggests to me that somehow heart, soul, mind and spirit are distinct, but uniquely interwoven and synchronized with the body.

2. *The Mind Of Christ Is Developed*

Second, ‘Holistic Christian Education’ is centred on understanding God's world from God's point of view, through His son, Jesus Christ. All subjects are pursued and taught from a distinctively Christian, Christ-centred, and biblically grounded view where the mind of Christ is cultivated: for, Who has known the mind of the Lord so as to instruct him? But we have the mind of Christ (1 Corinthians 2:16). Faith and learning are completely compatible. There is obvious transformation where men and women are prepared who can think Christianly about their disciplines, lives, society and all of humanity: Do not conform to the pattern of this world, but be transformed by the renewing of your mind. Then you will be able to test and approve what God’s will is – his good, pleasing and perfect will (Romans 12:2). This transformation of the mind impacts the soul, spirit, heart and body, as mindset and thinking patterns are changed and people are guided to make more healthy and godly choices and appropriate actions.

3. *Training Servant Leaders*

Third, ‘Christian Higher Education’ develops the passion and skills students need to become servant leaders in the Kingdom of God. Jesus is the role model of servant leadership: Instead, whoever wants to become great among you must be your servant, and whoever wants to be first must be slave of all. For even the Son of Man did not come to be served, but to serve, and to give his life as a ransom for many (Mark 10: 43-45). One training ground is to be a reader of the *African Journal for Transformational Scholarship (AJTS)*:

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of Tanzania (SJUT) hosting the *AJTS* on behalf of CPCHEA. After some downtime the journal came live online again in December 2014. Much work has been done to the journal including the revised Focus and Scope below:

> The *African Journal for Transformational Scholarship (AJTS)* is an international, peer-reviewed, open-access journal published in Africa, promoting transformation through the gospel. Thus, the *AJTS* focuses on developing biblically-grounded transformational knowledge, reflection and practice, which crosses languages, cultures, social status and disciplines. The aim is to encourage high quality academic scholarship focused on topics relevant to the African situation, realizing, however, that the globalization of human life means that these are commonly also global issues. While it especially wants to encourage African academic endeavour, it welcomes contributions from anywhere in the world. The journal also wishes to encourage novices to publish their work and will assist, if necessary, in ensuring an acceptable academic standard for contributions that show promise.

It is popular amidst educational institutions worldwide (or departments within them) to start a new journal. Whereas some of these journals may be striking an emerging niche area and have respectable editorial and advisory boards I would question the value of such an initiative for many other journals. There are issues including poor editorial standards, a focus and scope very similar to one or more other journals, and I suspect questionable motivations (e.g., status, easy publications). The initiative between SJUT and CPCHEA provides an alternative model where rather than initiating a new journal a promising current journal going through a difficult time is supported. I would suggest that academics look out for similar opportunities. Another favourable outcome is offering to review manuscripts for a promising or established journal. This may lead to an invitation to join the Editorial or Advisory Boards which would hold far greater prestige than starting a new journal regarded by most as ‘poor quality’. However, it is recognized that the *AJTS* is faced with a mighty task to encourage acceptable submissions and expand African Christian scholarship.

The following is a brief discussion on some further endeavours at St. John’s University of Tanzania which are at various stages of development. There is a completed project:

- Current Perspectives on Science and Faith in Tanzania

Others projects are ongoing:

- Science, Faith and Culture
- Drugs, Religion and Chemistry in Tanzania: An Interactive Seminar for Chemistry Students
- SJUT Views of Science and Religion Survey 2015

One germinating idea:

- Towards A Christian Response to Traditional African Medicine in Tanzania

The final endeavour is a potential ambition for the future:

- A Technique for Implementing Faith-Shaped Learning using Resources from the Christian Tradition

As you will see my philosophical framework is Christian and my approach is informed by that perspective.

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13 ‘Poor quality’ is to be distinguished from ‘predatory journals’ (Scholarly Open-Access: Critical analysis of scholarly open-access publishing, retrieved 21 January 2016, [http://scholarlyoa.com/publishers/](http://scholarlyoa.com/publishers/)).

CURRENT PERSPECTIVES ON SCIENCE AND FAITH IN TANZANIA
This was a survey conducted in the first half of 2012 with St. John’s University of Tanzania (SJUT) staff and students. It provided a valuable guide to the attitudes and beliefs of the SJUT community on the interaction of science and religious faith as well as stimulating participants to think about their beliefs in the area of science and religious faith. A full discussion of the survey has been published,\(^{15}\) which included the following two significant findings:

- The majority (77\%) believe God is constantly active in the world as Creator and Sustainer.
- The majority (80\%) of the educated\(^{16}\) believe science and religious faith are compatible, but most have difficulty harmonizing apparent conflict.

The results of the survey clearly presented an opportunity for guidance in the interactions between science and theology where a complementary relationship between science and religious faith is promoted. This survey was good ground work for the next initiative.

SCIENCE, FAITH AND CULTURE
An elective course ‘Science, Faith and Culture’ was developed and began in the Faculty of Natural and Applied Sciences at St. John’s University of Tanzania in the 2012-2013 academic year. The course endeavours to equip scientists with information which supports the harmony between faith in God and science. A course description, including evaluation and reflection on its first running has been published.\(^{17}\)

The course does not just provide information, but tries to guide students to think and evaluate for themselves, and hopefully see the compatibility between science and religious faith. ‘Science, Faith and Culture’ has potential as an adaptable model to be used in the curriculum at Christian universities in confronting some of today’s burning questions from a Christian point of view. The initial running of the course attracted an adequate number of students (26), but since then numbers have dwindled. I suspect this is largely due to a high grade not being easy to achieve and the pressures of passing numerous compulsory courses, while this course is an elective. Currently in the B.Sc. (Education) program curriculum review a slightly modified version of this course is being proposed as a Faculty-wide compulsory course for 1\(^{st}\) year students.

DRUGS, RELIGION AND CHEMISTRY IN TANZANIA: AN INTERACTIVE SEMINAR FOR CHEMISTRY STUDENTS
In order to supplement Tanzanian chemistry students’ current limited practical experience, a culturally relevant, interactive seminar which makes the chemical sciences real to the world of Tanzanians was developed. This was achieved via a Natural Product Drug Discovery seminar during which Tanzanian students were able to appreciate how Tanzanian culture is connected with the fundamentals and applications of the chemical sciences (in this case natural product drug discovery to combat diseases prevalent in Tanzania). The sequential connections were explained as follows:

- Tanzania has a rich traditional medicine knowledge that can be used to find new medicines;
- There are life threatening diseases in Tanzania which can potentially be combated by natural compounds from endemic medicinal plants;

\(^{15}\) Buchanan, Science and Faith in Tanzania, pp. 1-11.
\(^{16}\) In the article educated is broadly defined as ‘completed secondary school’.
Molecular interactions are fundamental to drug action in biological systems;
Molecular interactions are subject to the ‘laws of nature’ for example electromagnetic force;
The ‘laws of nature’ are governed by constants (such as Planck’s Constant, charge and masses of electrons, protons etc.);
The actual values of these constants are unexplained by science, but must have precise values for the universe to work;
The laws of nature provide a universe which is ordered, consistent and so knowable;
The religious African sees God (or spirits) as the ultimate cause behind the laws of nature.

A full description of the seminar has been published in Chemistry Education Research and Practice, including the design, an evaluation and some valuable conclusions. This is an inspiring seminar for chemistry students, linking different knowledge areas, including Tanzanian culture, and involving the African traditional manner of thinking with regard to one continuous order of understanding. African education would benefit from being contextualized for African culture living in global times. This seminar was an endeavour to do so and similar initiatives are to be encouraged among educational institutions.

**SJUT VIEWS OF SCIENCE AND RELIGION SURVEY 2015**
This was a survey conducted last year (2015) to supplement and extend the above completed 2012 survey. This study seeks to determine SJUT B.Sc. Ed. students' views of science and religion, including perspectives on the nature of science-religion interactions and extending further to opinions on evolutionary theory. The project also aims to uncover the potential sources of information regarding science and religion that the students are using to formulate their opinions; such as mass media, or the opinions of their local religious leaders. To reiterate again a survey such as this is good groundwork to prepare for the public understanding of science and religion through courses, lectures, seminars and other means.

**TOWARDS A CHRISTIAN RESPONSE TO TRADITIONAL MEDICINE IN TANZANIA**
At the time of writing this paper we are establishing a research proposal to gather survey data which will guide writing an article on the topic ‘Towards a Christian Response to Traditional Medicine in Tanzania’. Traditional medicine remains a significant part of Tanzanian culture. Historically traditional medicine was given a bad name. In Africa during occupied periods colonial powers connected traditional medicine practice to the use of supernatural forces or witchcraft, and traditional medicine was subject to discredit or legal bans. These days globally it is also surrounded by a lot of suspicion. On the one hand the medical safety of traditional medicine is questioned and on the other hand people suggest it is still used in the likes of witchcraft.

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22 Unpublished assignments from students at St. John’s University of Tanzania (SJUT) and personal communication with staff and students at SJUT.
A TECHNIQUE FOR IMPLEMENTING FAITH-SHAPED LEARNING USING RESOURCES FROM THE CHRISTIAN TRADITION

Christians in the academic world either struggle to apply their Christian faith to their fields of study or expertise, or avoid thinking about it entirely. David Gill says that many Christian academics have no Christian worldview regarding their discipline. Faith is privatized from not only the disciplines, but from the social institutions themselves. This is partly due to a lack of encouragement and teaching in connecting academic work with Christian faith. Gill encourages Christians to develop a plan that would strengthen their Christian mind, and learn to apply this Christian worldview in practical ways even at work.

One helpful way to talk about Christian education is in terms of ‘faith-shaped’ and to think of it as a craft. To shape by faith is to model, form or influence from a Christian perspective. We can only shape that which God has created out of nothing and these may be words, paint, musical notes, science experiments, people’s lives, and so on. Felch has rightly pointed out that gratitude and humility should ground everything we do as teachers and scholars: gratitude that we are invited to touch and mold, indeed to play with such wonderful materials; humility because these materials — words and paint and musical notes and science experiments and people’s lives — do not belong to us.

29 SM Felch, Christian Higher Education as a Craft, presented at the IAPCHE Faculty Development and Leadership Training Seminar, August 2013.
30 Felch, Education as Craft.
Each discipline is not self-contained, self-determined, intact and unchangeable.\(^{31}\) Each has its own history and multiple models. It is open to revision, critique, new practices, and new models. If someone says, ‘Of course, biology or literary theory or psychology or anthropology has proven that . . .’ then be cautious. Old textbooks reveal that some of the firm assertions about what ‘researchers have established’, are not applicable today. If there is a difficult issue/problem in a discipline then the challenge for the Christian academic is to try and use resources from the Christian tradition, which conform to the Word of God, to craft and shape a strong argument/a new model.

Whether Christian, Buddhist, Muslim, agnostic, atheist, all have access to the same space, time, matter and forces e.g., to the same brain cells, to the same progression of time, to the same cultural institutions and history.\(^{32}\) The results: the artworks and essays and laboratory reports and legal arguments and business case studies and educational objectives; will outwardly not look much different between any competent scholar or teacher. The word ‘distinctive’ as in ‘distinctive Christian scholarship,’ can be misleading and frustrating, if it is used to describe the raw results of work. Thus the complaint, ‘How can there be a Christian mathematics? 2+2 always equals 4.’ What makes the difference is how results are shaped or crafted.\(^{33}\)

Summarizing the words of Felch the suggested technique for implementing faith-shaped learning using resources from the Christian tradition is based on the following:

- A recognition of the world as creation
- A faithfulness to our covenant God

Where ‘faithful’ means faithful to what God teaches us from His word and from His creation through His Spirit. There is a need to be alert to those strategic interventions that a particular scholarship, research and teaching, needs to take in order to remain faithful. Complacency and compromise are to be avoided which cause the demotion of God, His sovereignty and honor. Don Carson has said ‘why should thoughtful Christians scramble for power and position, instead of for humility and faithfulness?’\(^{34}\)

Featuring the rainbow when discussing the visible light component of the electromagnetic spectrum in a chemistry lesson is an example of a strategic intervention. Here is a stepwise explanation connecting with the Christian tradition:

- Water is a medium with a different optical density than the surrounding air, therefore a collection of suspended water droplets in the atmosphere serves as a refractor (and reflector) of light because light waves refract when they cross over from one boundary to another.
- The range of wavelengths in white light becomes apparent when sunlight passes at an angle to the normal through a medium with a different refractive index, such as the water in a raindrop, producing the visible light spectrum.
- This is because mathematically the angle at which light is refracted depends on the wavelength of the light – so the different colours in white light, having different wavelengths, will be bent at different angles giving a vast array of droplets in space which we see as a circular arc known as the rainbow.
- For some people it is rational to reason that God is behind the mathematical form expressing the laws of nature\(^{35}\) ‘refraction’ and ‘reflection’ which explain the dispersion of white light into the colours of the rainbow.

\(^{31}\) Felch, *Education as Craft*.

\(^{32}\) Felch, *Education as Craft*.

\(^{33}\) Felch, *Education as Craft*.


\(^{35}\) Laws of Nature are to be distinguished from Scientific Laws. The latter can conveniently be explained as scientists' attempts to state or approximate the Laws of Nature (Internet Encyclopedia of Philosophy, [http://www.iep.utm.edu/lawofnat/](http://www.iep.utm.edu/lawofnat/)).
Although He is able to act supernaturally, God frequently uses the characteristics of His universe to convey His truth. In Genesis 9:11-17 we read that the rainbow is the sign of the covenant between God and Noah (and every living creature) for there to never again be a flood to destroy the earth.

This covenant and all the old covenants have been superseded by the ‘new covenant' which offers forgiveness and eternal life through Jesus Christ and can be read about in Hebrews 8 and 9.

**CONCLUSION**

Seven diverse initiatives with relevance to Christian Higher Education have been introduced. The hope is that these will inform others and whet the appetite for related initiatives elsewhere. The Apostle Paul tells us in Romans 12:2 that we are not to be conformed to this world but we are to be transformed by the renewing of our mind. With the forces of secularism all around there can be no more urgent task than the growing of the Christian mind, that is, the development of the capacity to think Christianly. A key route towards this is Christian Higher Education: education which emphasizes the distinctive of a Biblical view of each academic discipline and all of life. It would be good to move the academy back to how it was originally meant to be under Plato, searching for truth out of which right conduct, good character and correct behaviour may result.

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